PAIRED

Making Memories

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MIMS Capstone Project Report

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Table of Contents

Table of Contents 2

Acknowledgements 4

Hello World 5

- Our Challenge 5
- Our Solution 5
- Product Description 5
  - Product Features 6
- Target Market 7

Understanding our Users 8

- User Interviews 8
  - Goal 8
  - Activity 8
  - Assumption 8
  - Recruiting 8
  - Findings & Key Insights 9
- Object Based Study 9
  - Goal 9
  - Activity 9
  - Assumption 9
  - Findings & Key Insights 10
    - Raw Findings 10
    - Interpretation Findings 11
- Post Diary Survey 12
  - Goal 12
  - Activity 12
  - Assumption 12
  - Findings & Key Insights 12
    - Difficulty of remembering their camera 12
    - Level of attachment with the camera 13
    - Difference between private space and social media 13
- Usability Studies 13
  - Goal 13
  - Activity 14
    - Round 1 and Round 2 14
    - Round 3 14
  - Assumption 15

Key Findings & Insights: 15
Competitive Analysis 15
Evaluation Approach 16

From Paper to Product **19**
Paired: The Charms 19
Designing the Charms 19
Under the Hood 20
First Functional Electronic Prototype 20
The BLE Nano 21
Circuit Diagram 22
Our Hardware Journey 22
Paired: The App 23
Under the Hood 23
Front End Features 23
API's Leveraged 23
Back End Features 24

Marketing to the Users **25**
Industry Trends 25
Competitor Assessment 25
Business Objective 27
Product Personality 28
Market Opportunity 28
Revenue Model and Pricing Strategy 29

What Lies Ahead **30**

Appendix **32**
Example Messaging Taglines 32
Revenue Projection Assumptions 32
App Screenshots 33
Market Overview 34
Design Process 35

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Hello World

Our Challenge

There are 277 million users on LinkedIn, and a similar number for Twitter and Snapchat. And then there's Facebook leading the social media ecosystem with 1.2 billion users. With the increase in quantity of connections on social media platforms, the quality has diminished. Facebook friends, instagram/twitter followers, even for our most intimate relationships, we are using the same virtual tools to connect and share memories with the ones we love.

Our Solution

Paired will allow you and the special ones in your life to connect deeper with each other and capture those precious moments to help create everlasting memories. In an intensely competitive market, Paired aims to use both hardware and software components to support the most important types of relationships in your life by pushing users to stay away from their devices and experience the moments.

Product Description

Paired is an interactive relationship keychain that combines hardware and software to provide a platform for users to co-create memories and share them digitally with their loved ones. The hardware is a pair of IoT enabled keychains that people can buy and give one to their loved ones, these keychains will help users create memories by capturing their location and amount of time spent with each other through the click of a button. Once the button is clicked, the data will be synced with the mobile app.

Paying emphasis on gift giving, we designed the gift box to remind you of warmth in the relationships. And that's why the keychain has a button that you can click to easily save a memory the moment that you make it.

Hardware Functionality Includes:

- *Bluetooth Sensor*
- *LED Light feedback*
- *Haptic feedback*

The keychain can be thought of as an invitation to a beautiful private adventurous journey in which every moments of the journey would be remembered. A private, virtual space in which all your memories, photos, videos with that one person are stored at a place where only two of you can access. In the app, you can explore and get recommendations to adventures that both of you can go out and do in the real world, and in the process create more memories together.

As an application Paired allows users to create memories by tagging their location and images along with associated text that they want to share. Once the memory is created it is shared to a common timeline to both the users, this helps keep track of all those precious moments for that specific relationship.

Product Features

- Make Memory: User can co-create memories on the app that allows them to tag images based on the location and time.
- Instant Memories: User can use the charm to make a memory without accessing the app. The location and time gets captured on the app and the user can proceed to add these to their memory collection,

- The Timeline: The app displays the memories created by the pair in a beautiful and compelling view that helps users track all their memories
- Adventures: The app pushes top experiences around the user's current location to nudge them to go out and complete these adventures and make memories.

Target Market

As our target audience, we believe all relationships are serviced by Paired. These include relationships such as Best Friends, Siblings, Couples, Parent - Child.

User Segmentation				
	Segment 1	Segment 2	Segment 3	Segment 4
				
Type	Best Friends	Siblings	Parent - Child	Couple
Likelihood of joining an app like Paired	Highly Likely	Likely	Less Likely	Highly Likely
Likelihood of giving gifts to each other	Less Likely	Less Likely	Likely	Highly Likely
Priority	High	Medium	Low	Very High
				Target User

Looking at the different user segments, and understanding the likelihood of the users to use such a product, for the purposes of our initial MVP we have decided to focus on couples as the target user. In defining a target demographic we are focused on incorporating the brand positioning of offering a product that helps couples go out and experience the precious moments that are dear to them and share those memories with each other through our platform. Our target demographic will be middle- to upper-middle class couples looking to strengthen their relationship or showing a higher level of commitment to each other.

Understanding our Users

In order to develop a successful product that actually assists users' relationships, we have conducted research through various methods to help us gain deeper empathy and understanding of our users. From the diary study we've conducted, we are able to draw several recommendations for hardware design, such as making it more portable and personal. From our user interviews, we understood how users perceive memories in relationships and that broadens our range of design to accommodate different experiences. We have also improved our user interface after 3 rounds of interviews. At last, a competitor review has helped us established our niche in the market.

User Interviews

Goal

Collect in-depth information about users' attitudes, beliefs, feelings, and emotional reactions about adventure experience.

Activity

5 user interviews that look into the progress couples make in their relationships.

Assumption

We expected that questioning and probing around the idea of progress of a relationship will reflect why couples would continue going on Adventures. We thus also assumed that users would want and need some form of feedback about their relationship progress they are making by going on Adventures. Without some progress status, the application will feel like an application for simply storing memories rather than creating them.

Recruiting

We interviewed 5 people who are in relationships. All of them are in mid or late 20s. Three of them are female and two are male.

Findings & Key Insights

As time goes by, people tend to forget about the specifics of what actually happened, they tend to remember the general feelings whether they were happy, sad, or excited in their relationship.

For example, one interviewee said ""I feel like the first year, we support each other like the cats in the picture. "

Couples are future-oriented when looking for motivation to continue their relationships.

The incentive of using social media sometimes is to show off.

There is no loyalty to specific app for documentation for relationship.

Object Based Study

Goal

Get a wide perspective on how people feel, think and know about their adventure experience and find our "blind spots" (Goodman, E., Kuniavsky, M., and Moed, A.(2012). Observing the user experience: a practitioner's guide to user research. pp 180).

Activity

We handed out a single disposable camera to each of six couples and two groups of friends. We gave them daily tasks throughout the week. Each picture went along with a short written description in a journal that we also provided the participants with. Instead of conducting user interviews, we decided to create a post-survey based on the results of the object-based diary study. Through this technique we were able to get more quantitative data to supplement the extremely qualitative nature of the object based technique.

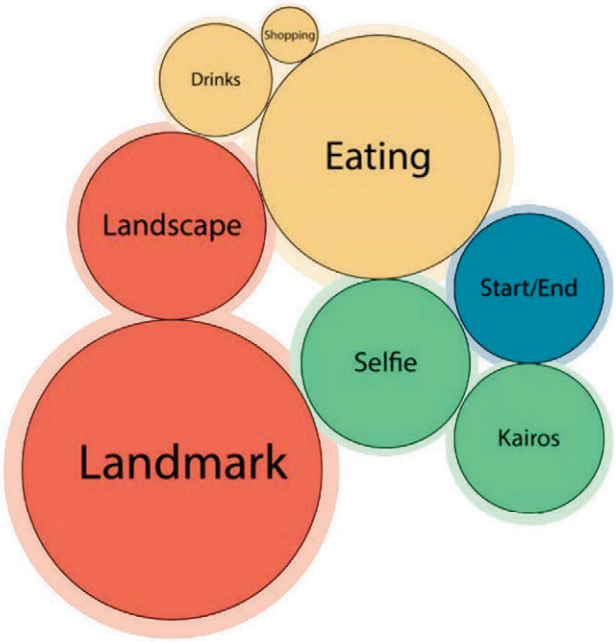
Assumption

We assumed that 10 days was long enough to gain valuable information about two individual's most valuable daily memories. We also assumed that couples and friend groups would differ in the type of memories they made.

Findings & Key Insights

Raw Findings

Using an affinity diagram method to draw out themes, we gave each memory a label based on raw observations. We attempted to leave out interpretation from this diagram as best we could. In our research findings we found that participants made memories about these themes in descending order:

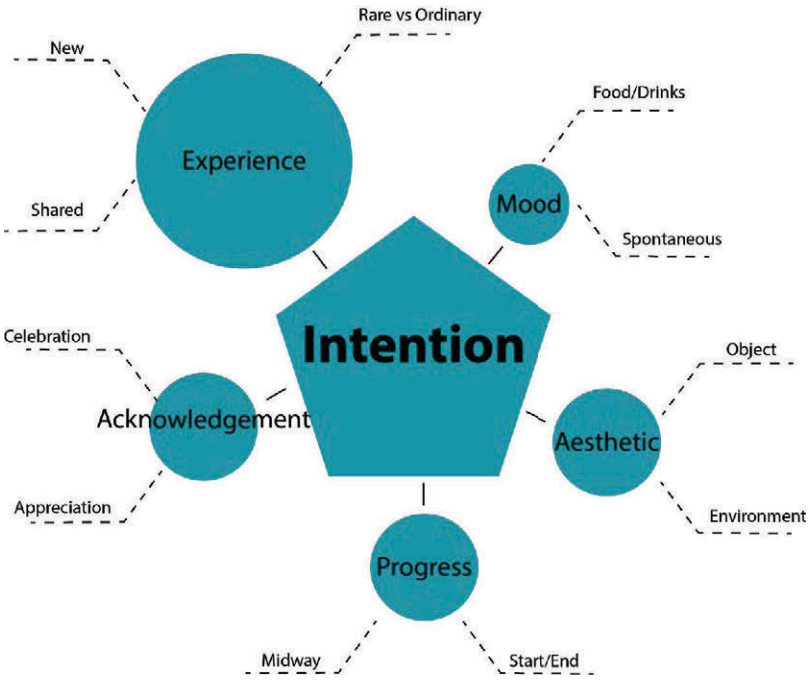


- Landmarks (16 memories)
- Eating (13 memories)
- Landscape (10 memories)
- Selfies (9 memories)
- Beginning or end of an event or journey (8 memories)
- Kairos, defined as personal special moments that only the two people may understand (8 memories)
- Drinks (6 memories)
- Shopping (3 memories)

Interpretation Findings

In a second pass at drawing themes from the object based diary study, we labelled each of the memories with our own interpretation, meaning the intention behind why participants made a specific memory. From this technique we discovered five major themes with significant subthemes in this descending order:

- Experience
    - Shared - memories which are significant due to sharing the experience
    - New - memories which are significant due to the activity being fresh and new
    - Rare vs Ordinary - memories which are significant due to either being very rare or so common that it has become special
- Acknowledgement
    - Celebration - memories which are significant due to the participants wanting to celebrate a big moment
    - Appreciation - memories which are significant due to one participant being thankful of the other's kind act
- Progress
    - Midway - memories which are significant due to the memory marking a midway checkpoint in an activity or journey
    - Start/end - memories which are significant due to the memory marking the start or end of an activity or journey



- Aesthetic
    - Object - memories which are significant due to an object being physically pleasing or attractive to the eye
    - Environment - memories which are significant due to the natural environment being physically pleasing or attractive to the eye
- Mood
    - Food/drinks - memories which are significant due to an outing for food or beverages
    - Spontaneous - memories which are significant due to an unforeseen moment coming to life.

Post Diary Survey

Goal

Collect mix of quantitative and qualitative information on participants experience and progress in light of running through entire diary object based study

Activity

Participants took short survey about their overall experience

Assumption

We expected that participants would be able to recollect their entire experience

Findings & Key Insights

Difficulty of remembering their camera

Participants generally found remembering their camera difficult (with six finding it difficult, two being neutral, and two finding it easy). Three of the main reasons are as follows: 1) It was difficult to carry around such a large object; 2) Bringing around a smartphone is second nature; 3) Bringing around a new and unusual item is unnatural.

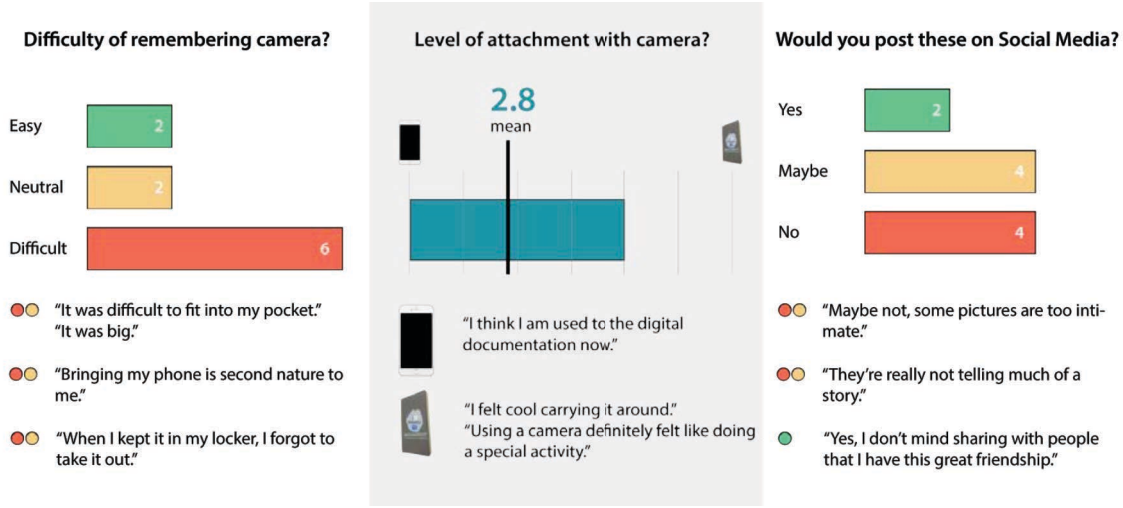
Level of attachment with the camera

Participants were asked to rank their level of attachment with the disposable camera and journal (1 being low and 7 being high). The mean was 2.8. There were two general factions. On one side, there was a faction that was used to digital documentation. On the other, there was a group who felt the disposable camera brought something new and novel to the experience of making memories.

Difference between private space and social media

There was a mixed reaction on whether participants would post the memories they made in the study on social media. Two said yes, four said maybe, and four said no. For the participants who said no or maybe, they were uncomfortable with the high level of intimacy and lack of storytelling aspect with memories made in a private space and which would potentially be shared on social media.

Usability Studies



Goal

Examined and evaluated how users perform specific tasks, guide the redesign and implementation of user flows, features and functionality (Goodman, E., Kuniavsky, M., and Moed, A.(2012). Observing the user experience: a practitioner's guide to user research. pp 273).

Activity

Round 1 and Round 2

Task 1- Going on an Adventure
Imagine that you are in San Francisco with your Paired partner. Can you try to open the adventures map and explore that screen? Try to start an adventure at the Presidio? Before you click ahead, feel free to talk about your thoughts at each screen.

Task 2 - Creating a memory through a Check-in
Imagine that you are at the Campanile and you want to create a memory there. Can you show me how you would go about doing that? Again speak about what you see on the screen and talk through your actions before you do it.

Task 3 - Viewing memories through the Timeline
Now that you've created a memory, you want to view all of your previous memories. Where would you go to do that? How would you want to interact with the memories there?

Round 3

Task 1 - Creating a memory from Hardware
Imagine that you are here in South Hall with your partner and you create a memory with this device. You are now in the app. How would you go about viewing the memories you made with this device? Again speak about what you see on the screen and talk through your actions before you do it.

Task 2 - Adding, Editing, Removing a memory through Hardware page
How would you add the South Hall memory to your timeline?
How would you edit your South Hall memory?
How would you remove your South Hall memory?
*Have user eventually add South Hall memory to timeline

Task 3 - Viewing memories through the Timeline
Now that you've created a memory, you want to view all of your previous memories. Where would you go to do that? How would you want to interact with the memories there?
How would you comment on the memory?
How would you add a photo?
How would you edit the memory?

Assumption

We decided that no onboarding direction is the optimal user flow. We assumed that with multiple rounds of usability tests we could achieve this.

Key Findings & Insights:

We use the insights from our User Research to guide the designs for our final MVP. Our design iterations can be found in the appendix.

Competitive Analysis

13 Competitors are selected. The 13 competitors are - Between, Couple, WeLove ,Swarm, Path, Snapchat, Instagram, Facebook, Yelp, Foursquare, Trip Advisor, PokemonGo, Day One. All 13 competitors fall into the software industry, but many of them differ from each other quite drastically. The criteria for selection is not complicated, as long as the competitor has features that are directly competing or distantly competing then they are included in the analysis. The major categories can be broken down into Social Media Apps, Relationship Apps, Travel Apps, Mobile Game Apps, and Journal App. Social media is a direct competitor because they want to be the one stop for communication between all relationships. Journaling app is a competitor because Paired can be considered as relationship journal. Travel apps provide recommendations for places to go and they are competing with our adventure features. Lastly, Pokemon go is less of a competitor but more of a similar app in a very different context.

Evaluation Approach

Comparing to 13 apps was not easy. In order to overcome this challenge while maintaining enough precision, our team spent time to go through the major features of all apps.

	Between	Couple	Welove	Path	Swarm	Snapchat	Instagram	Facebook
Relationship App	Activity Newsfeed	Anniversary	Anniversary	Timeline/Newsfeed	Add Friends	Take Photo	Live Story	Live Story
Social Network	Anniversary	Calendar	Chat	Chat	Chat	Send Snaps to friends	Chat	Chat
Rating App	Calendar	Chat	Forum for Relationship	Add Friends	Leaderboard	Add friends	Photo Newsfeed	Upload Photos
Game	Call	Draw	Games	Post Photos/Videos/Notes	Coin	Chat	Explore Photos	Timeline for Ph
Journal	Chat	List	Merchandise Store		Badge	Save Photos	Upload Photos	Newsfeed
	Folder for Photos/Video/Notes	Moments	Time Counter		Newsfeed	View all saved Photos	Timeline for Photos	Groups
	Memory Box	Share Location	Timeline (Two Views)		Check In	View Live Story	Follow People	Events
	Sticker	Sticker	Wish List		Photos	Discover News		
	Sticker Store	Sticker Store			Places you've been (Map View)			
	Tap to add home photo	Voice Message			Top friends			
	Theme				Top places			
	Timeline for Video/Photo/Notes							

Once we had the list of features for each app, we categorized them into - Past Memories, Present Moment, Explore Adventure, Incentive System, Social Feature, and Advance Feature. All these categories are pretty arbitrary and the main reason for the categorization is because they are the major categories in which Paired design our features around. We wanted to know if an app is more past-oriented, focusing on storing past memories, or future oriented, focusing on making future recommendations and planning.

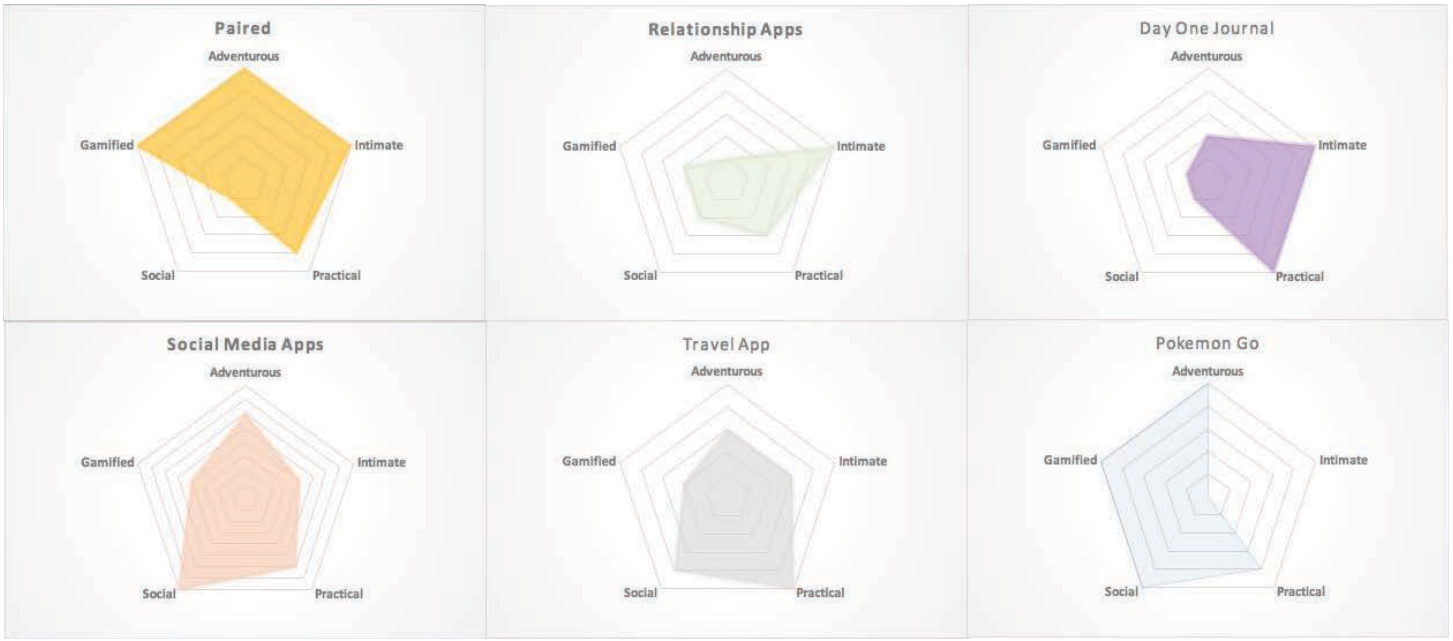
Having categories of features are not enough. We also want to establish the qualitative metrics so we can understand our positioning. The five categories are - Adventurous, Intimate, Gamified, Social, Practical. Each of the category is independent on its own. The definitions for each of the category are as below:

Adventurous: Do the users feel like they are on an adventure when using the app?
Intimate: Does the app provide a sense of intimacy?
Gamified: How much does the app try to gamify the process?
Social: How much emphasis is placed on socialization between users?
Practical: Does the app serve an obvious purpose or solve an obvious problem?

	Fun/Adventurous	Intimate/Private	Practical/Useful	Social	Incentivize/Gamified
Paired	5	5	4	1	5
Relationship App	1.33	5.00	3.33	1.67	2.00
Between	0	5	3	1	1
Couple	0	5	3	1	1
Welove	4	5	4	3	4
Social Network	2.8	2.2	3.2	4.2	2.2
Swarm	4	3	3	3	4
Path	1	2	3	4	1
Snapchat	4	3	4	4	2
Instagram	3	3	4	5	2
Facebook	2	0	2	5	2
Rating App	3	3	5	4	2.3
Yelp	3	3	5	4	2
Foursquare	3	3	5	4	3
Trip Advisor	3	3	5	4	2
Game	5	0	4	5	5
Pokemon Go	5	0	4	5	5
Journal	2	5	5	1	1
DayOne	2	5	5	1	1

In order to reduce the amount of radar charts, we categorized the apps into - Relationship Apps, Journal App, Game App, Social Media App, and Travel App.

Then the team qualitatively assigned the categories of features into each of the above categories based on the competitor aggregation. For example, Swarm's main page shows a newsfeed of where people are so it's definitely more social. Facebook is all about socialization as well as Snapchat. So all these added up, the Social Media App would receive a 5/5 for the social category on the radar chart.



Paired's radar chart has a different shapes than the rest of app categories. It's a good thing! From the radar chart we are able to draw a few insights:

- Paired differentiates itself from all the other relationship app by having more incentives to explore the real world! (Visualization/Adventure Exploration/Badge Collection/Check In at physical Location).
- Paired differentiates itself from social network app by making itself more private.
- Paired differentiates itself from travel apps by making itself more gamified.
- Paired differentiates itself from Journal app by making it more relationship-focused and more adventurous

Overall, we feel like the combination of Travel + Gamified + Relationship summarizes how Paired can be different from our competitors. We are a private space for your important relationship in which you can store all your memories and go on fun adventurous exploration with your partner in a gamified setting.

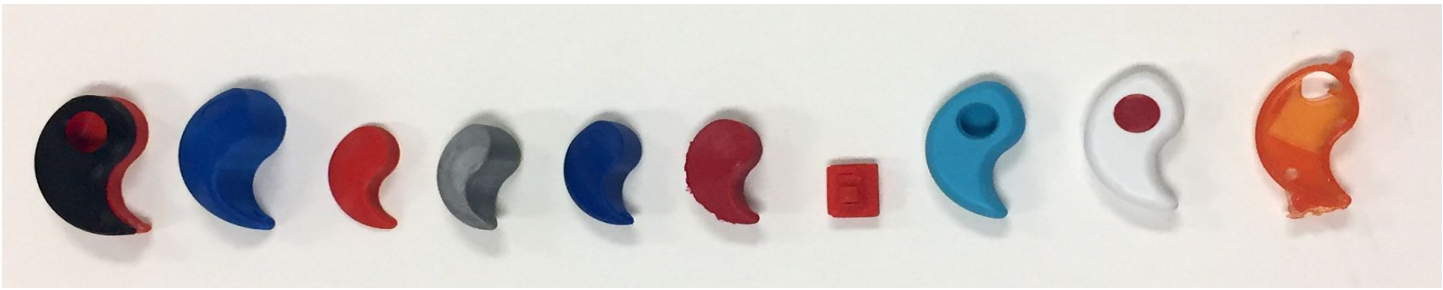
From Paper to Product

Paired: The Charms

Designing the Charms

The initial thought behind our charms was to create two devices which fit together as if they belong to one another. We were inspired by the yin-yang sign as it represents balance. The curvature is meant to fit within the palm of a person's hand. The red circular colored depression is the button. When the two individuals come together the charms would vibrate or provide a form of immediate feedback.

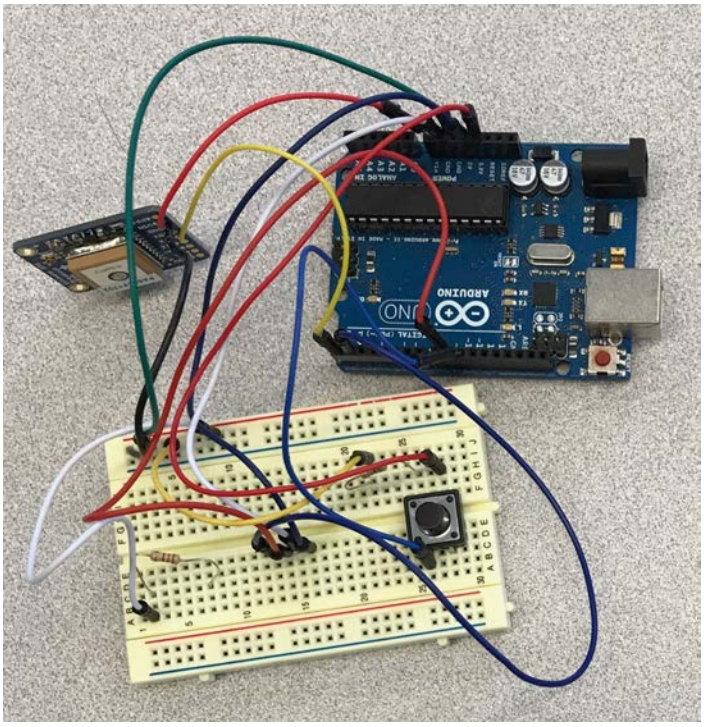
We went through a number of different iterations to get to our final design. Our first design was too hardlined and severe. We then created a more circular shape for continuity. We worked on getting the device smaller but ran into trouble fitting the hardware inside the casing. We redesigned the charm again that became a mixture of the first design and the more spherical design which would account for both space efficiency and smooth continuity. Playing with different materials we found the best prototyping material to be Polyactic Acid (PLA) plastic. In order to create a softer touch for the button we decided to use Ninja Flex which is a more flexible plastic. We are planning to use Carbon Print in place of Ninja Flex for a higher resolution. We are exploring how we might use Silicon casting and Resin mold to get a product ready look. PLA require post-processing of filing sanding of almost two hours to create the same effect as Resin.



Under the Hood

While the vision for the hardware was always to have a small device that fits in people's hands, the process of creating the electronics started with very bulky iterations.

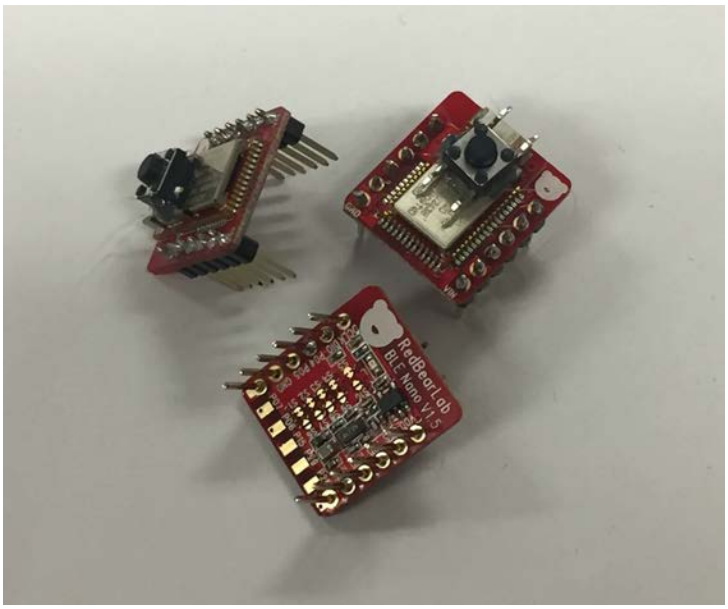
First Functional Electronic Prototype



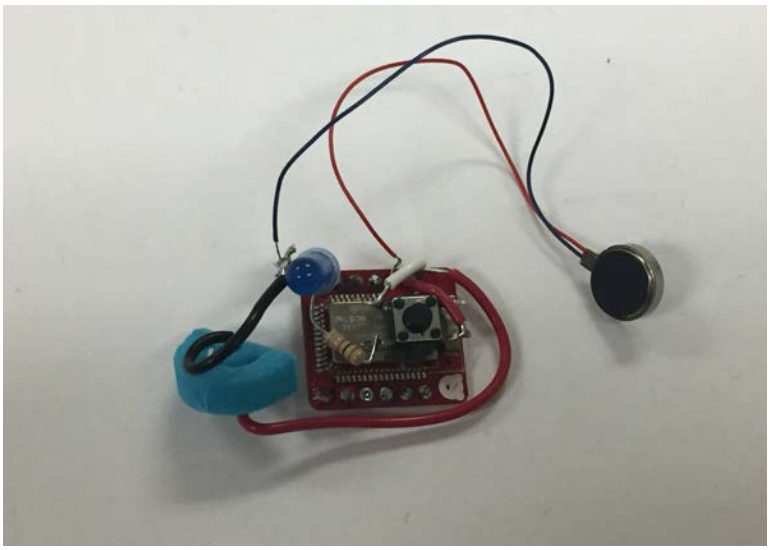
As can be seen, the first electronic prototype consisted of a bulky Arduino (in blue), an equally bulky breadboard (in white), a GPS module, and innumerable lengthy wires. The goal of creating this first prototype was to have a functional prototype that transmits GPS coordinates of the device over bluetooth to your cell phone.

Once this functionality was nailed down, the focus shifted to reducing the size of this ensemble while preserving the functionality. The key to achieving this goal lay in acquiring an Arduino that was 1/9th the size of the original Arduino. The BLE Nano Arduino ticked this box perfectly.

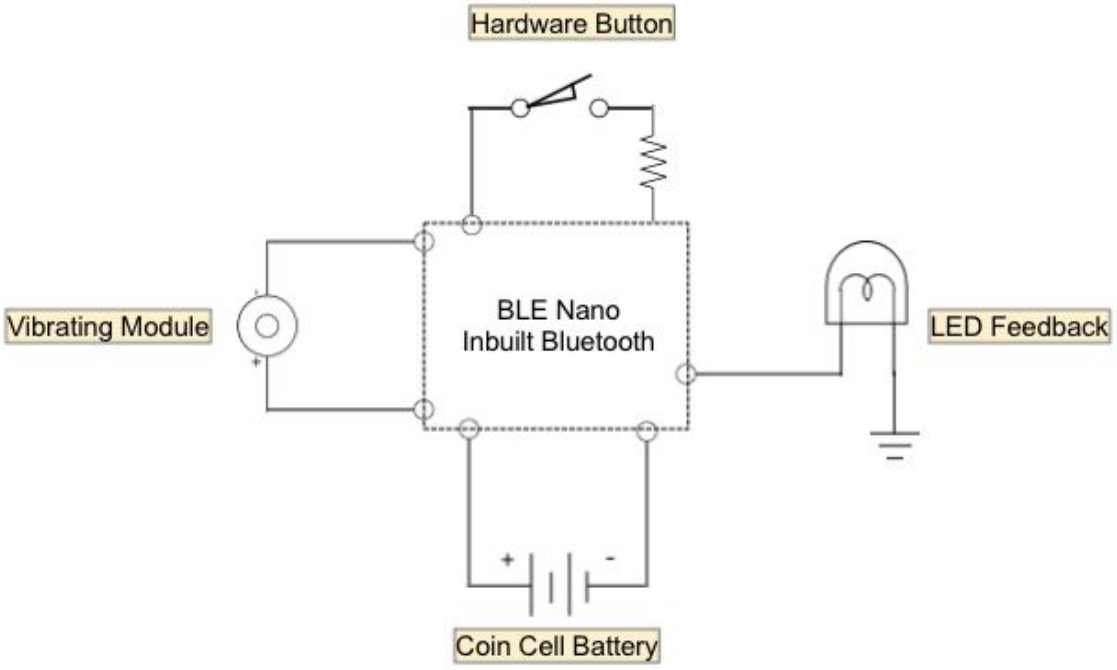
The BLE Nano



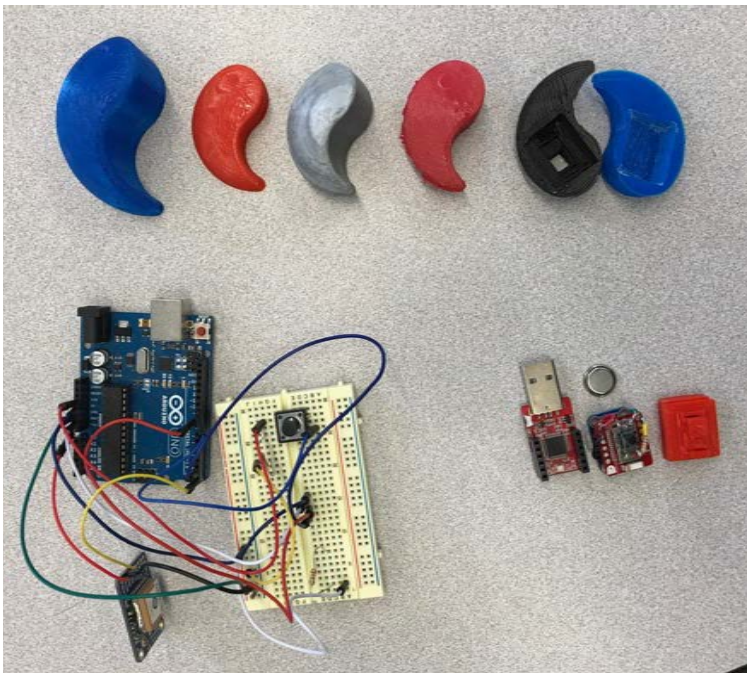
A fraction of the size of the original Arduino, the BLE Nano also incorporated a Bluetooth module inside it, saving more space. The next goal was to leverage this size advantage and recreate the original functional ensemble. We also added additional functionalities to the hardware, including haptic feedback on the press of a button (using a vibrator module), as well as a light acknowledgement on the press of a button (using an LED). Here is the final functional hardware.



Circuit Diagram



Our Hardware Journey



Paired: The App

The app went through many iterations and feedback rounds, as mentioned in previous sections, to get to our first MVP stage. We started with the Sketch app to design our screens for the application. We also used Illustrator to create our assets, including the charms, the penguins and the icons. We used the Invision prototyping tool to create the interactive prototypes we showed to our research participants. Our iterations and mockups can be found in the Appendix.

Under the Hood

For our project, we decided to use the Ionic 2 Framework for our project. Ionic's ultimate goal is to make it easier to develop native mobile apps with HTML5. Our code is based on Angular 2 which is the underlying framework that powers Ionic. It is responsible for the component API that is the building block of Ionic.

Front End Features

Ionic is focused mainly on the look and feel, or the UI interaction, of an app. We use Ionic Components which are reusable UI elements that serve as the building blocks for our mobile app. Components are made up of HTML, CSS, and JavaScript.

We use angular2 to build our front end feature set and app interactions. Our client side code is supported by typsecript, CSS, and HTML5. Each page in the application is set up as an individual component and navigation is set up between these individual components. Each page gets added to our navigation stack. Ionic 2 uses a navigation stack, which involves pushing views onto the navigation stack and popping them off when we navigate through the app. We use key plugins throughout the app to help support key interactions and features such as bluetooth connection, native components, and getting user's current location.

API's Leveraged

Foursquare - Capturing top experiences around user's current location and displaying it on the map.
Google API - Present maps on adventure page to plot top experiences.

Back End Features

For our server side implementation we set up an instance of firebase in our application to connect to our front end logic. We implemented the Firebase Real Time Database which is a cloud-hosted database. Data is stored as JSON and synchronized in real time to our connected client. We use Cloud Storage for Firebase which lets us upload and share user generated content, such as images and video, and allows us to build rich media content.

To access our database, we set up multiple service providers for each different module. Our main 2 providers are:

- *User Service: Access all user data such as profile, etc*
- *Memory Service: Access all memory data such time, location, date, text, images, etc*

For the purposes, we decided to proceed with a NoSQL database structure, given our requirement to scale with high amount of user generated content. Below is our NoSQL document structure:

```
"code-pair" : {
  "Pairing_Key" : {
    "user_id1" : "value",
    "user_id2" : "value",
    "username1": "value",
    "username2": "value"
  }
}

"hardware-memories" : {
  "user_id" : {
    "hardware_memory_id" : {
      "city" : "value",
      "date" : "value",
      "day" : "value",
      "location" : {
        "lat" : "value",
        "long" : "value"
      },
      "month" : "value",
      "state" : "value",
      "time" : "value",
      "venue" : "value",
      "year" : "value"
    }
  }
}
```

```
"user-memories" : {
  "user_id" : {
    "memories" : {
      "memory_id" : {
        "city" : "value",
        "comment": {
          "id":{
            "comment": "value",
            "userid": "value"
          }
        },
        "date": "value",
        "day": "value",
        "image" : [],
        "location" : {
          "lat" : "value",
          "long" : "value"
        },
        "location_tag" : "value",
        "made_by": "value",
        "month": "value",
        "state": "value",
        "text": "value",
        "time" : "value"
      }
    },
    "user2" : "value"
  }
}

"users" : {
    "user_id" : {
    "charmId" : "value",
    "code" : "-value",
    "email" : "value",
    "firstMem" : "value",
    "instantMemNum" : "value",
    "proPic" : "value",
    "user2" : {
      "uid" : "value",
      "username" : "value"
    },
    "user2id" : "value",
    "username" : "value"
  }
}
```

Marketing to the Users

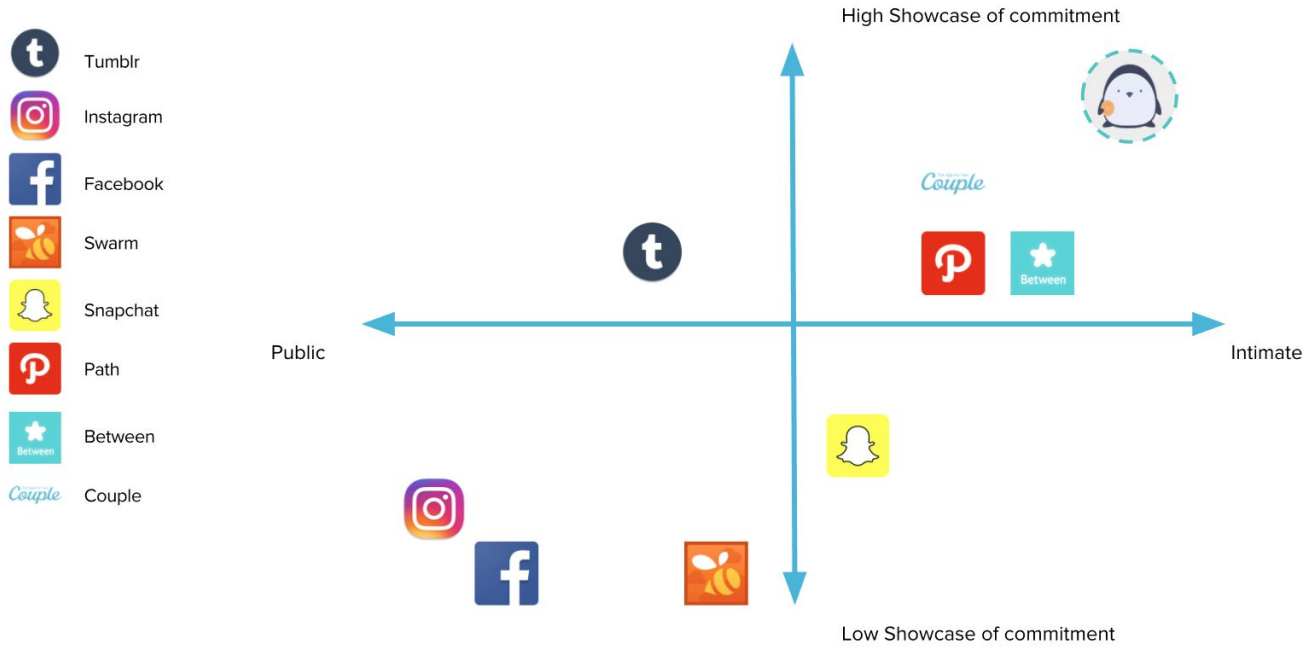
Industry Trends

For online connectedness among individuals there has been a huge shift in the way current users are using mobile applications to share with one another. Below are some key trends that will be key contributors to this space:

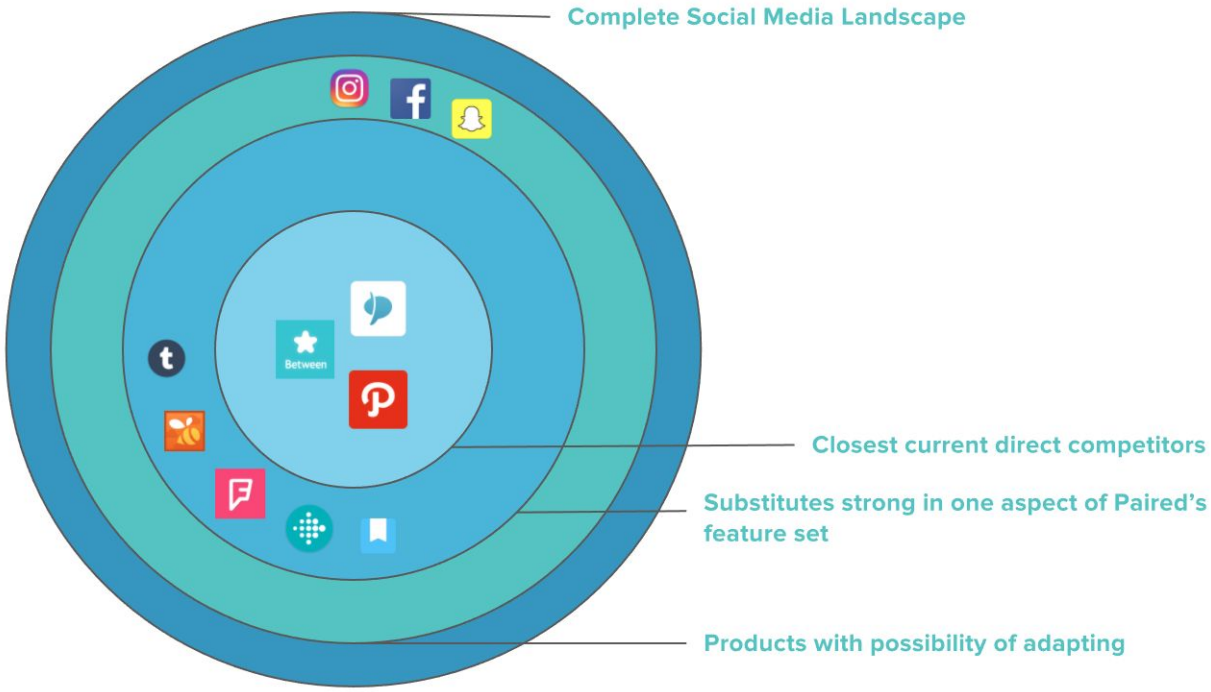
Social Media and Networks - Current Industry Trends	
Emerging Trends	Current Supporting Applications
Incorporation of Augmented Reality	Pokemon Go, Traces.io
Focus on Instant Memory Sharing	Snapchat, Instagram, Facebook, Twitter
Focus on one to one networks	Path, Couple, Between, Welove
Location Based Memory Chronicling	Day One, Evernote, Google Keep, Swarm
Integration of IoT devices to connect with individuals	Fitbit
Activity recommendation for groups and individuals	Yelp, Swarm, Foursquare

Competitor Assessment

Within the current market, Paired's primary competitors are Couple, Path, and Between. From a market share perspective, these applications currently are the go to apps for partners to use when co-creating content and sharing with one another. Looking at the competitive landscape, we see that products are currently are categorised as either catering to many-to-many relationships or personal one-to-one relationships. Also, current users can be seen as showcasing different levels of commitment to their partner in the relationship based on the method of sharing and application they use for connecting with them.



Given Paired's unique mix of hardware and software components, we believe that we have a great strategic advantage when entering the market. Further details regarding the product will be shared in the next section.



Launching ourselves initially as an application for relationships we see ourselves competing with Path, Between and Couple for revenue share and daily active users. However, as mentioned

earlier, given our unique value proposition, the current market status presents a huge opportunity for the brand to launch themselves as a key competitor.

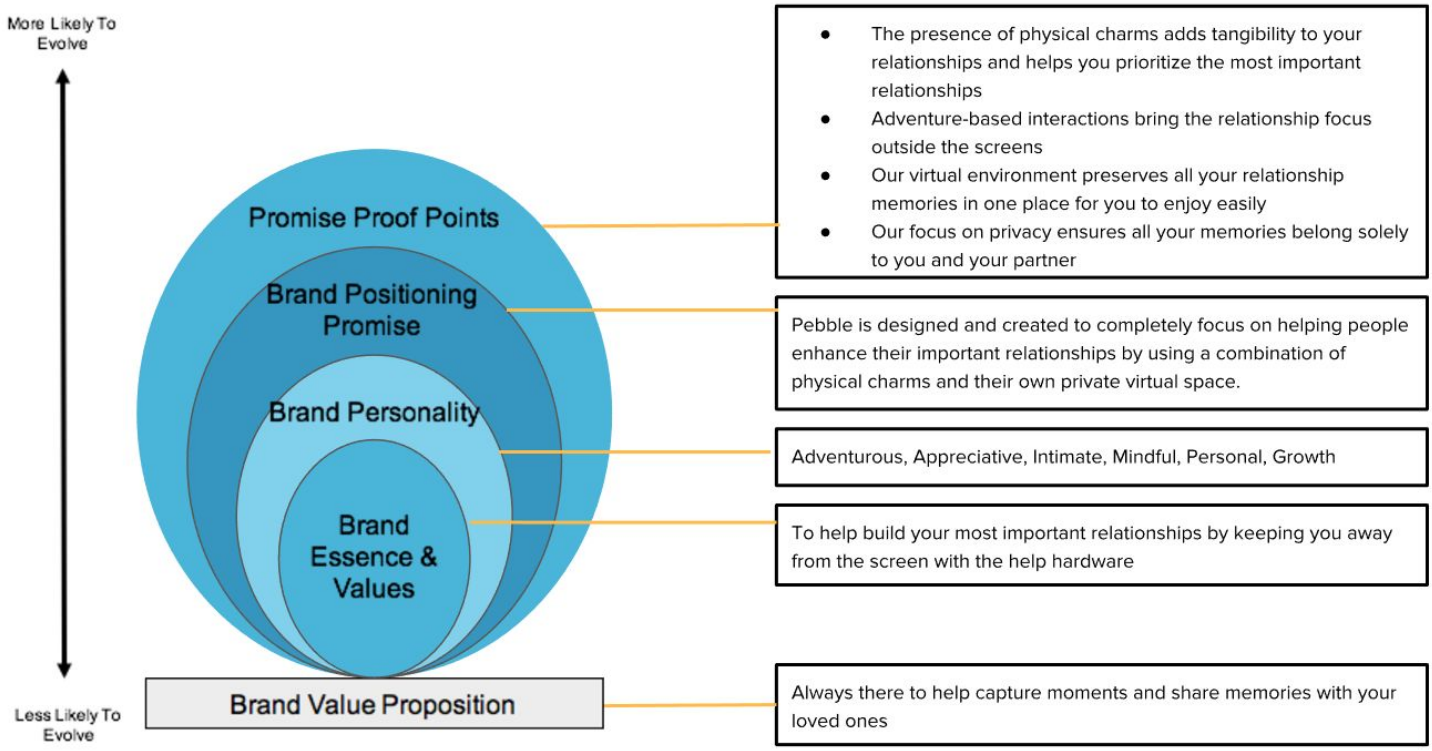
Business Objective

As a startup, Paired aims to establish itself in the current integrated social media application industry. Aggressive market penetration is key factor to success for Paired. The vision of the company is to be the go to brand when users think about using a product to create and share memories with their loved ones. Our key business objective include:

- Achieve a revenue of $1 Million by 2018
- Acquire 20,000 active users by end of March, 2018 through a Public Launch

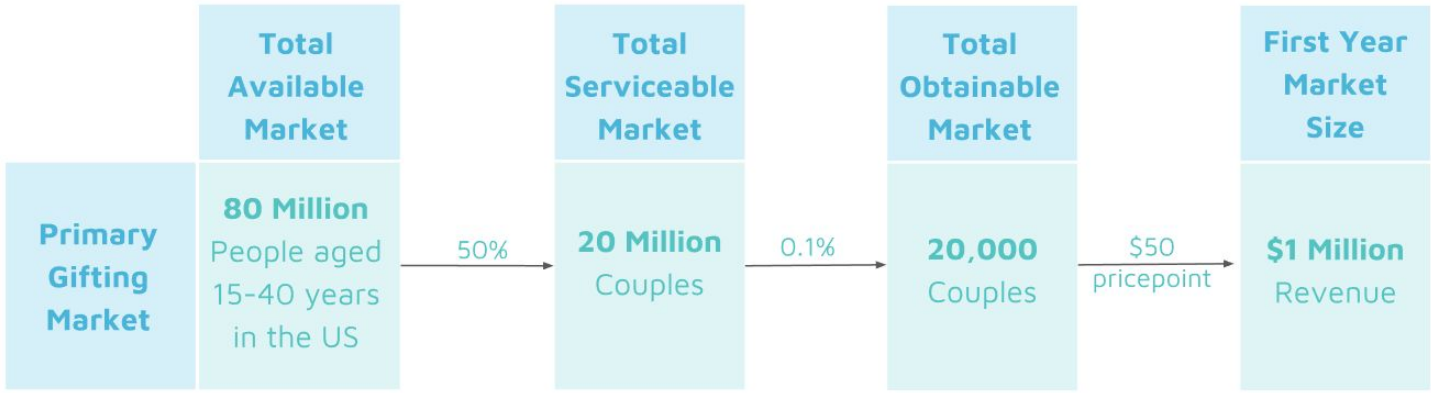
Our secondary objectives include achieving high mindshare amongst current millennial mobile application users looking to establish a one to one virtual space with their loved ones, and establish Paired as a brand that promotes experiencing the present and creating memories with your loved ones.

Product Personality



Market Opportunity

As we discussed above, we will be targeting user segment 4 which is primarily couples. As a result when estimating our market we make certain assumptions with respect to the



Revenue Model and Pricing Strategy

Current Price Point Distribution for IoT devices

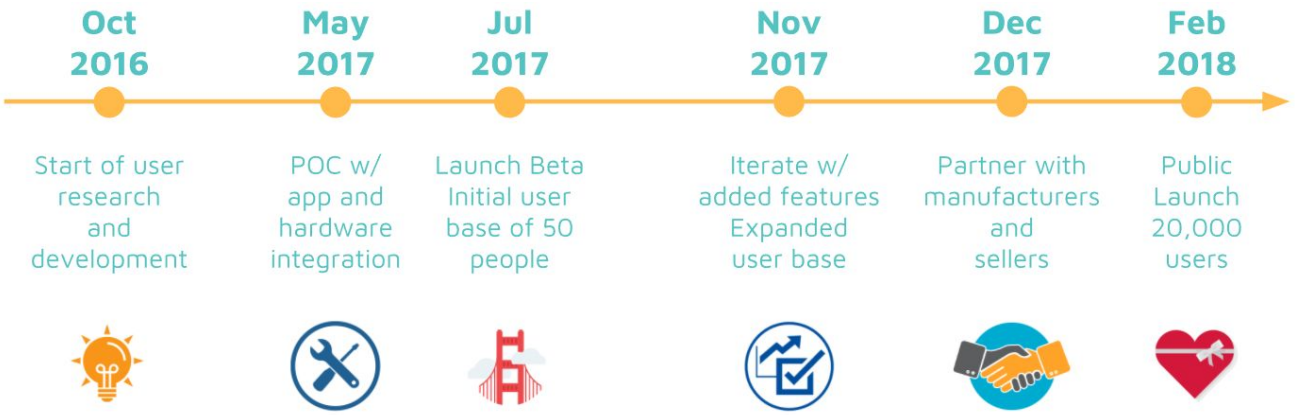
Whistle ($9.99)	Tile ($30)	Up24 ($35)	TrackR ($44)	Fitbit ($60 - $245)	Mynt ($40)	iHack ($20)

Paired keychains along with the companion app will be sold at a price point of $50. We believe given the current prices of IoT enabled devices, $50 is a suitable price point for Paired. The app will be available online for free through the app store. We believe given we are focussing on the gifting process of the device, the slightly higher price point is indicative of a higher commitment one has towards the partner they are sharing the keychains with.

Looking at our business objective for revenue, we see that if we are on track with obtaining the serviceable market, we can achieve a revenue of $1 Million. Please refer to appendix for calculations and assumptions for revenue projections. Also note these projection do not include additional revenue due to integration with online stores.

Year	Active Users	Price Point	Revenue
2017	20,000	$50	$1,000,000
2018	22,100	$50	$1,105,000
2019	400,000	$50	$20,000,000
2020	442,000	$55	$24,310,000
2021	488,410	$55	$26,862,550

What Lies Ahead



For the next few months following graduation, there are a few things team Paired will be focused on before February 2017, the actual launch date of our product in the market. In order to get to that stage, we have to go through a very thorough customer discovery process during the summer. Around 20 couples will be selected for beta users test rounds. The 20 users will be recruited based on their profiles, these profiles will match closely to our ideal customer markets. The goal of the beta test is to validate several things:

- Product Hypothesis - Paired makes several assumptions that people would enjoy a technology gift in which they can use to document their relationships through hardware and software. We will follow up with our users closely to validate this hypothesis
- Customer & Problem Hypothesis: Are couples our ideal users? Do couples need an intimate and private space to document their moments instead of photo albums, instagrams, and snapchat? Do couples enjoy collecting badges as they go around the cities?
- Market Type Hypothesis - Does our product qualify as gift and bring people joy and utility? Are dating couples our initial market focus?
- Competitive Hypothesis - Do we have advantage towards Swarm, Couples, Between?

The customer discovery process above will be a fast iteration cycle, in which the couples will use our products from July Until around September, and for every week we will be able to solicit design feedback in order to change our features and product focus.

At the same time, we will focus on validating our distribution hypothesis as well as demand creation hypothesis. Our initial plan is to distribution the product through pre-orders online. Is this the best possible plan? Also, we have to answer the question of how can we best create demands. Is it through online video and social media marketing? Given the amount of budget, what marketing campaign can we run that will be the most effective?

After all these questions are answered, we will adjust our positioning and value creation deck to better understand the value we deliver in the market. At the same time, we will finish our preliminary sales road map that will allow us to sell to the first group of users in February. The current plan is to launch pre-order and marketing campaign in around October and ship it out to our users a week before Valentine's day. This sales roadmap will have to be validated as well in the next few months.

Once we are able to acquire users organically, the challenge will lie in keeping the users and growing the users. We have to follow the loop of get, keep, and grow. Customer Development team will continuously improve our customer loyalty and experiences with fast responses to customer concern. At the same time, business development will use what customers love about our product to continue grow the customer base.

Keep in mind, as a startup, things are fluid and dynamic. Plans will have to be adjusted all the time. The focus would be to use the minimum resources and time in order to find the product market fit and the first group of Evangelists that love our products. Whatever actions and plans are required to achieve such goals should be identified and taken by the team.

Appendix

Example Messaging Taglines

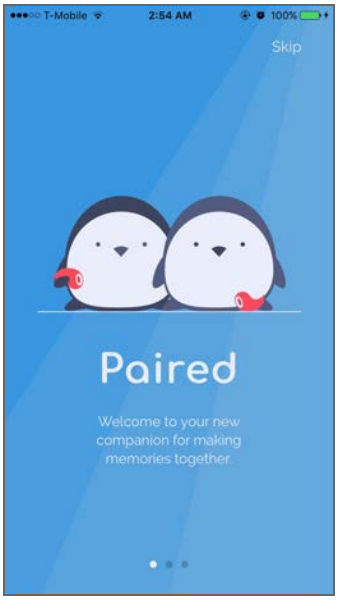
- Every moment is a memory waiting to be created
- You live the moment, we capture the memory
- There is beauty in the little moments, all you have to do is live in them
- Things end but memories last forever

Revenue Projection Assumptions

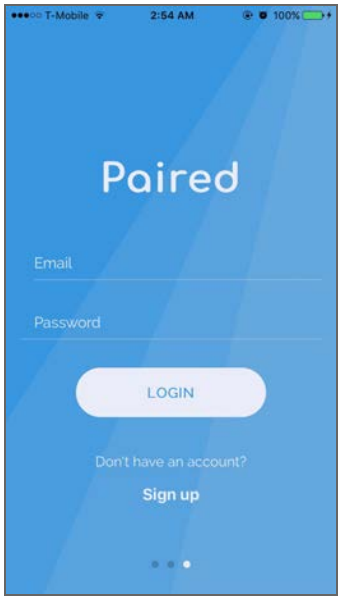
Looking at our revenue model, the global social media research summary for 2017, states that the annual growth in social media users was 21%.

Users in 2017: 20,000
Social Media user base growth: 21%
Expected growth in couples for Paired usage: 10.5%
Expected growth in usage for Paired post campaign completion in 2019: 2% of couples
Anticipated price increase in 2019 because of increased cost due to increased user base: $55

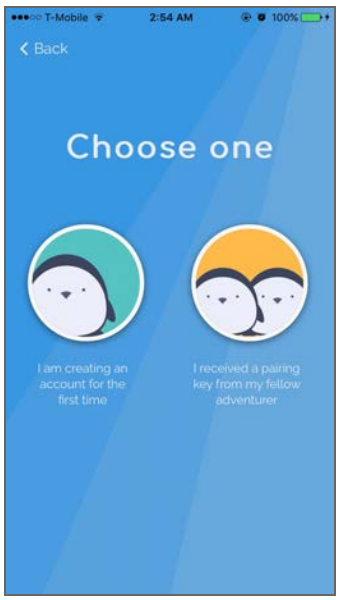
App Screenshots



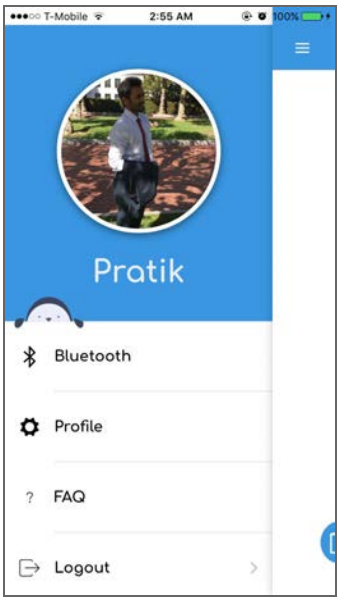
The onboarding screen



Login Page

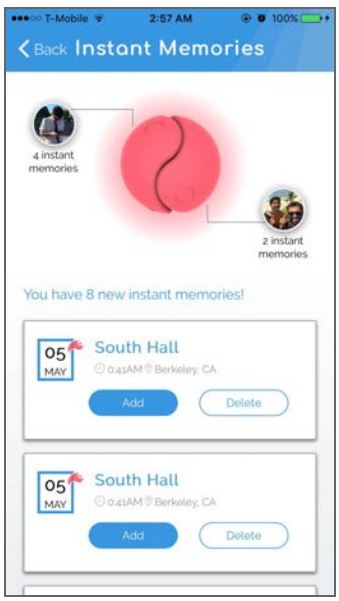


New User Registration

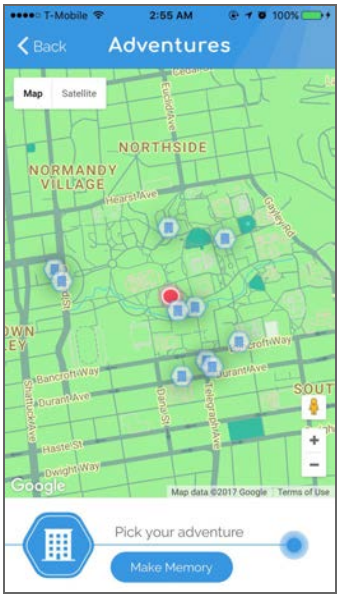


Sidebar Menu

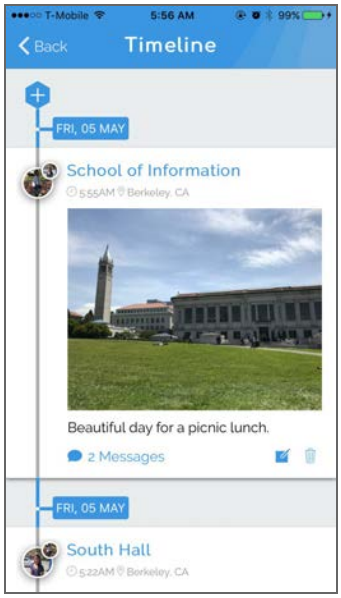
Make Memory



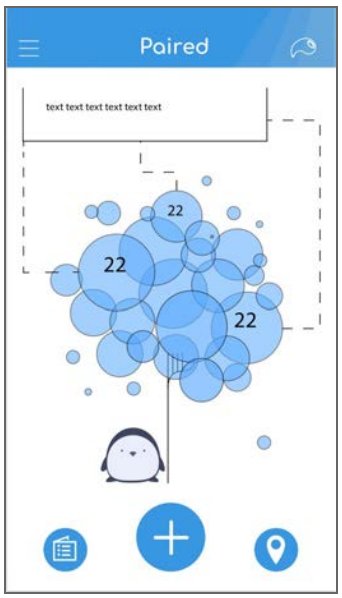
Hardware Memories



Adventure recommendations

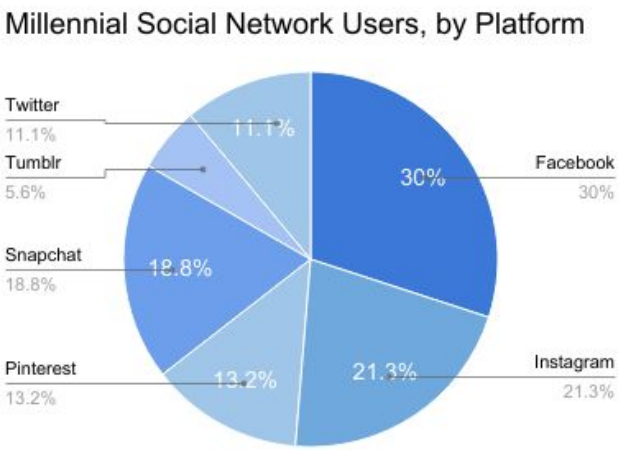


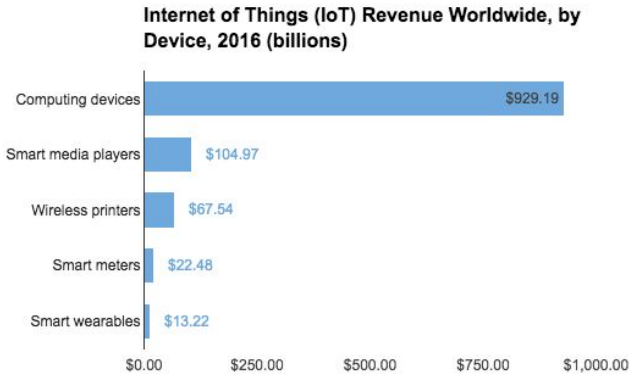
Memory Timeline



Home Page

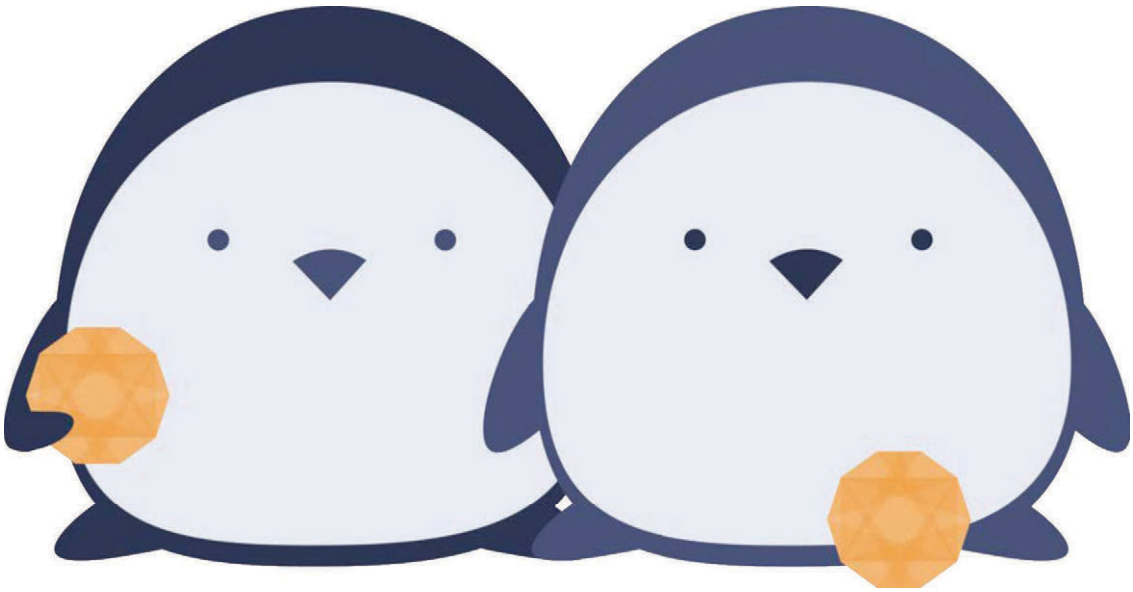
Market Overview





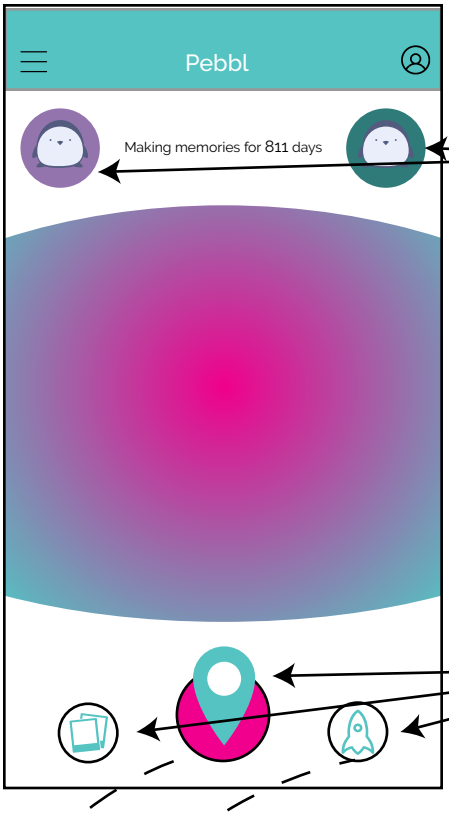
Internet of Things Device Spending Worldwide, by Segment, 2016-2020 (billions)				
	2016	2017	2018	2020
Consumer	$532.52	$725.70	$985.35	$1,494.47
Business (vertical-specific)	$634.92	$683.82	$736.54	$863.66
Business (cross-industry)	$212.07	$280.06	$372.99	$567.66
Total	$1,379.51	$1,689.57	$2,094.88	$2,925.79

Design Process



Iteration 1

Key findings from the first iteration
of the user interface design

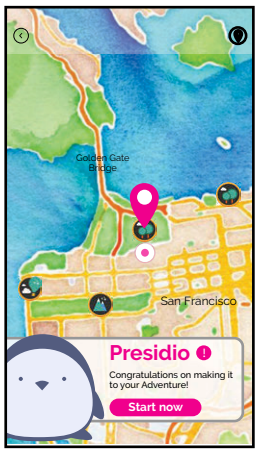


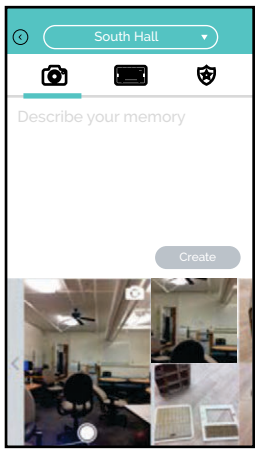
- Participants had to ask interviewer whether the penguins represented them and their partner

- Participants were tasked to navigate to all three types of pages (no t much context was given on purpose)

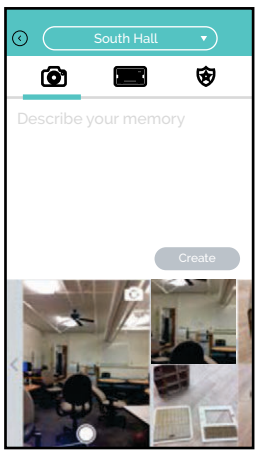
- t ons were confusing and lead to wrong ep ectations; such expectations created wrong interpretations and lead to poor success results

Adventure Flow



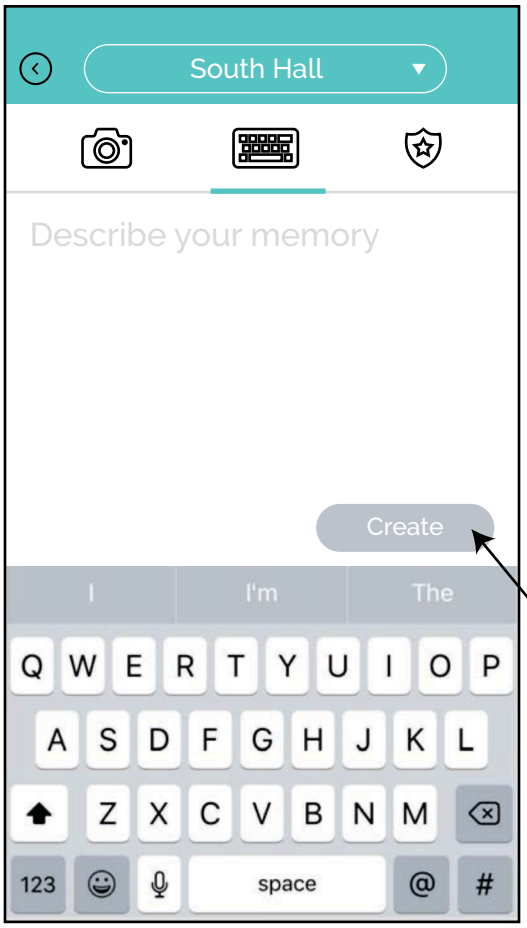


Check-In Flow



- There was confusion about the difference between an Adventure creation and memory Check-in

- Interpretation is that confusion manifests due to the fact that both user flows end at the same screen (. e. the Check-in screen) One solution would be to create a different flow that allows users to see what fun activities are available during the adventure and check them off (almost like a to-do list)



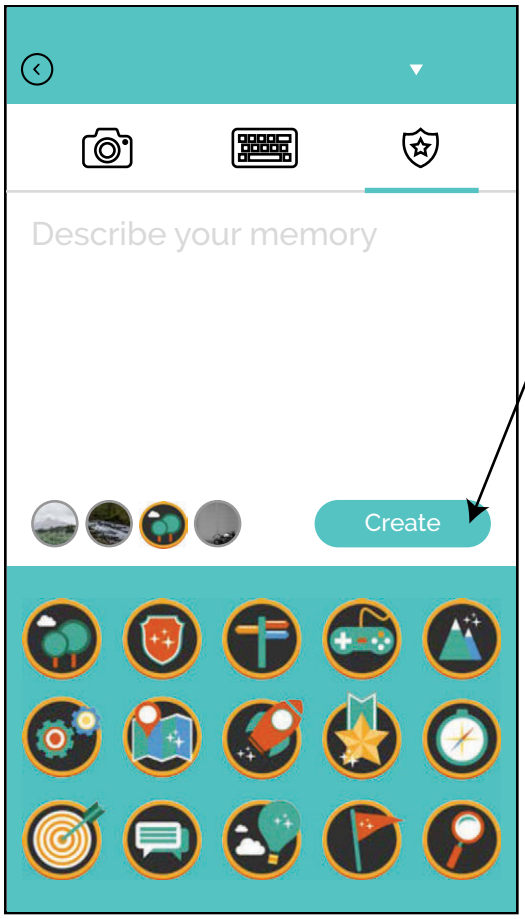
- Only 1 person recognized that the location was wrong. It should have said 'Campanille' or 'Presidio' depending on the task

- Users should recognize the location as an important event.

- Users were tasked to complete the task of creting and saving a memory

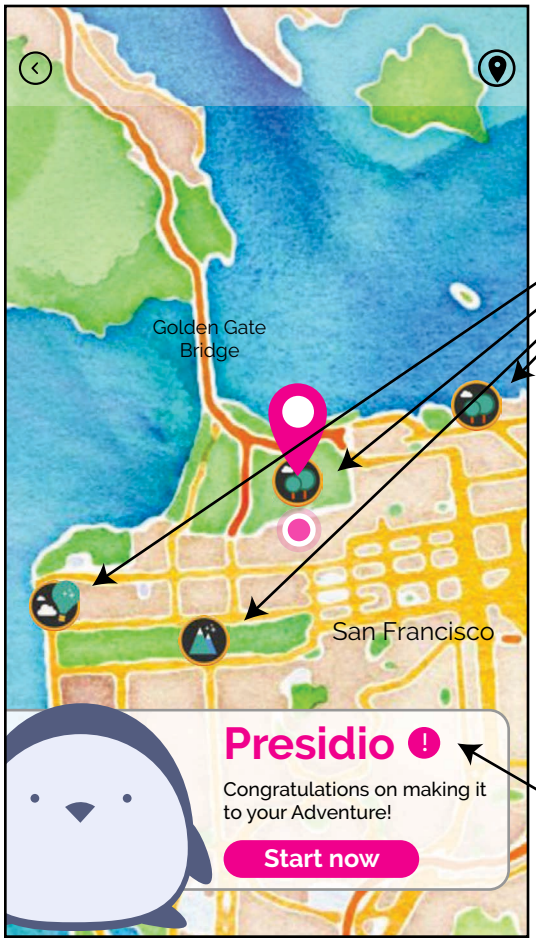
- 0 out of 4 particpants were able to complete the task

- Participants could only create a memory if they added an Activity icon in addition to their photo and text content; they never made it to the 'Activity' badge



- Activity icons were being misunderstood as irrelevant emojis rather than meaningful actions that the user and their prospective partner were taking

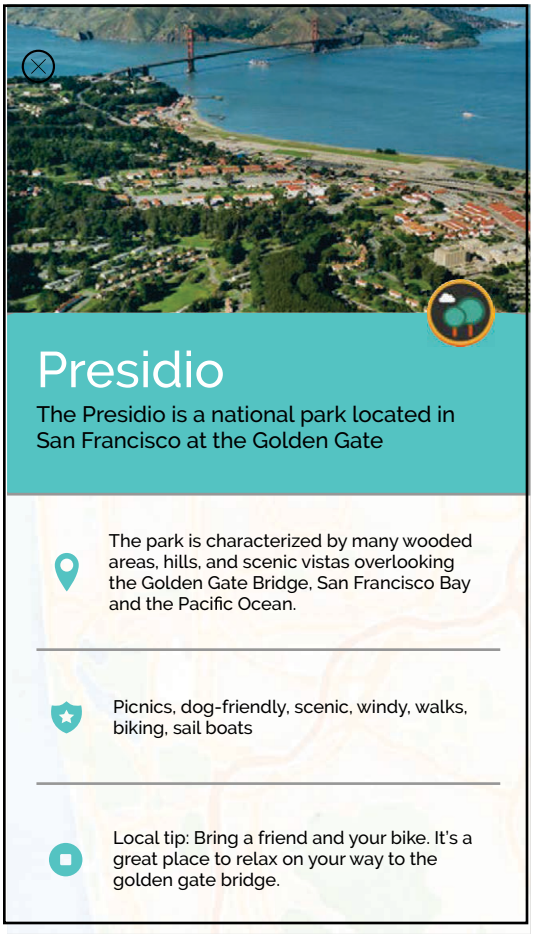
- One solution would be to use NLP to make this process automatic. Another solution would be to create a linear user flow in which users must complete tasks step by step ɛ .g. photo addition screen, text content screen, etc)



- The icon for activities on the discovery map should be more identifiable and understood as predefined adventures for users to engage with.

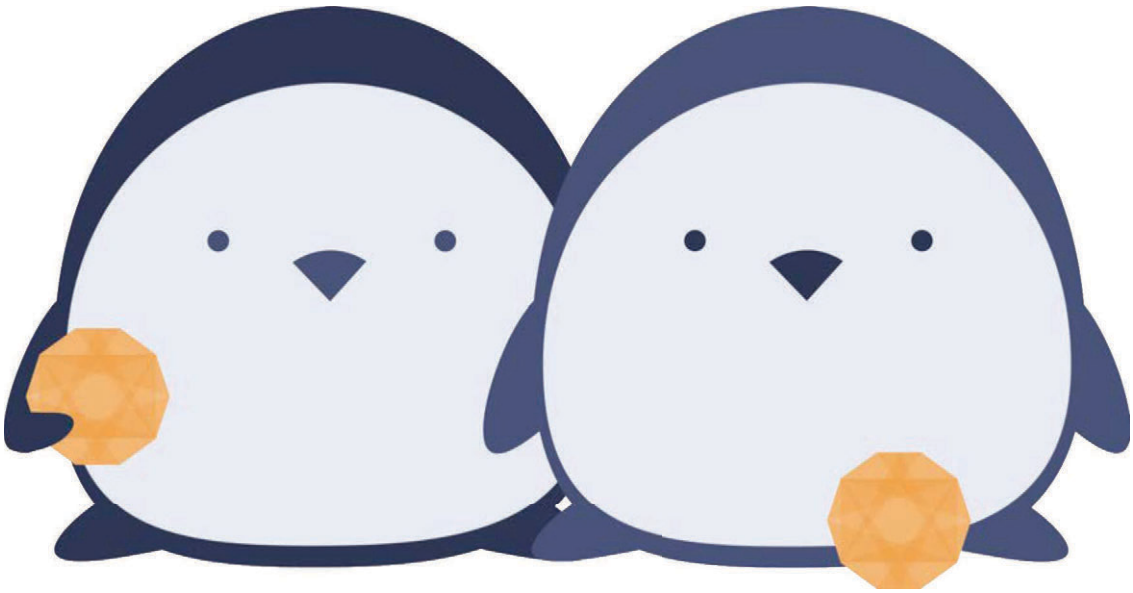
- Users expect to get more information when they reach a place instead of check in right away

- Even though there is the possibility of retrieving more information using the icon ( ) This was not apparent to any user. 0 out of 4 users attempted to click the icon ( )



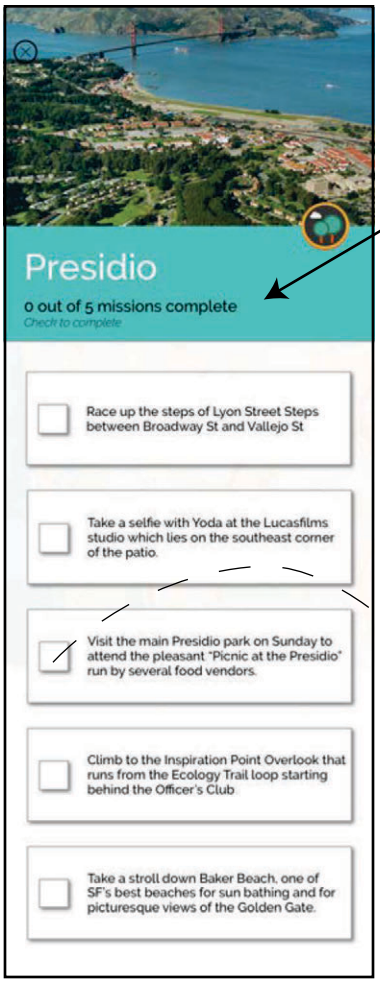
- Adventure information was perceived as dull and did not seem to put users in the mood for going on an adventure

- Participants expected to see specific activities for each adventure. One solution would be to create a checklist of engaging activities (e.g. "Wait for the bells to ring at 12pm at the Campanille. On weekends you will see various street performers!"

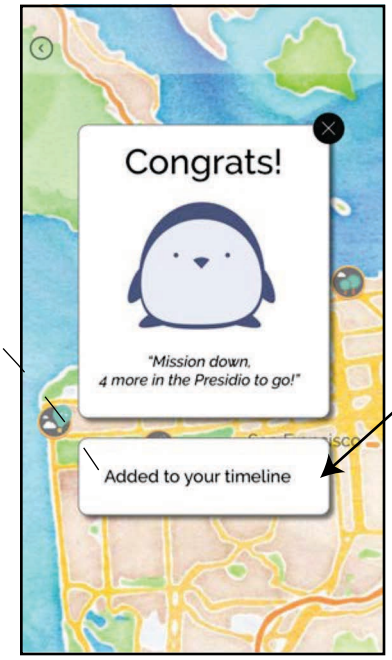


Iteration 2

Key findings from the second iteration of the user interface design



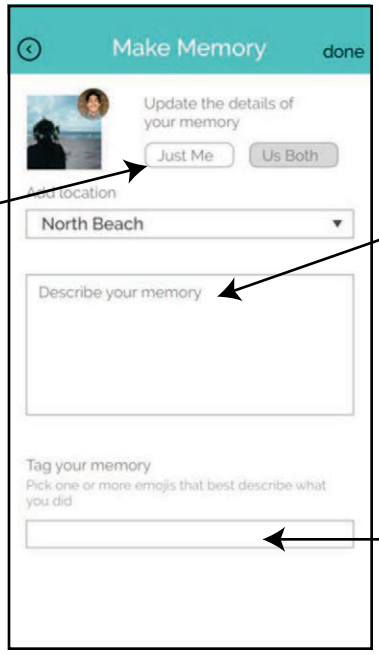
- Missions sound too extreme in the activity spectrum; possible solution to revert back to adventures vocabulary



- Users did not understand that the 'Added to your timeline' button was a button and that it would autoatically take the user to the timeline

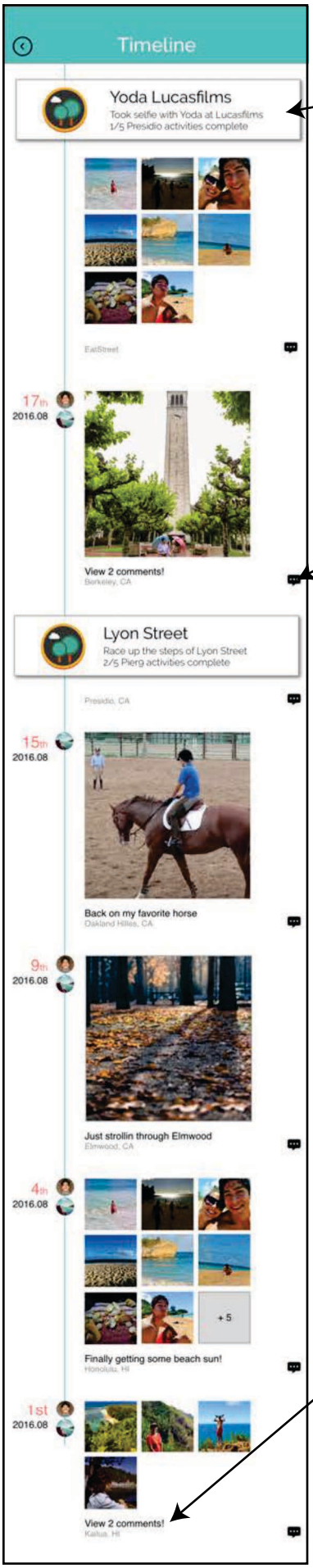
- 4 out of 4 users understand the new addition of 'Just Me' and 'Us Both'

- Give users the ability to edit memories in order to post-date memories



- Prompting text in the description box was not warm or inviting enough for the purpose of this page

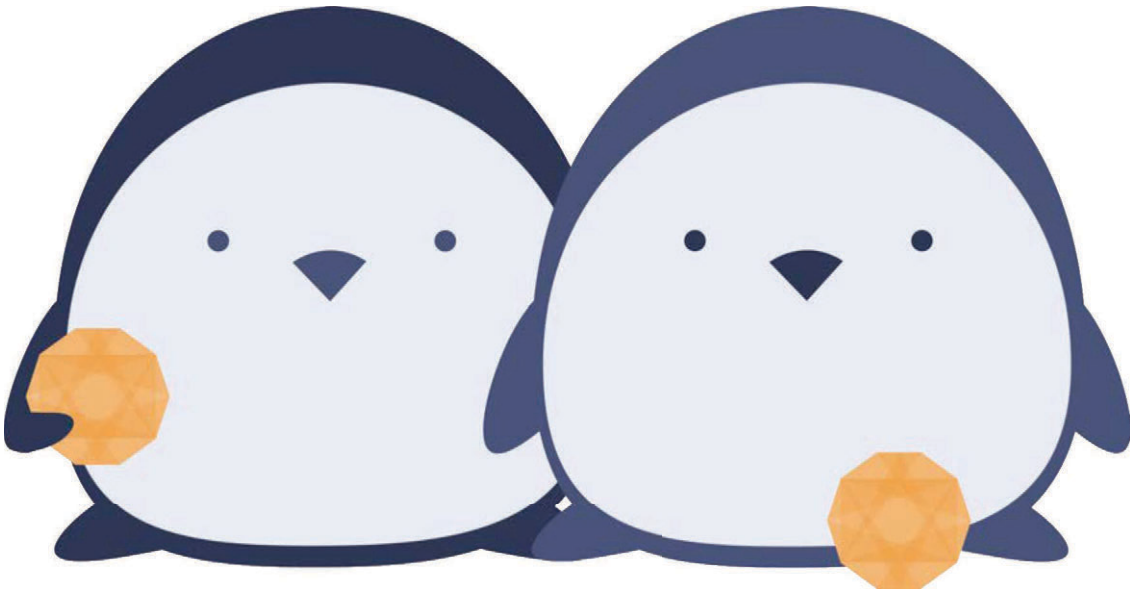
- 3 out of 4 users did not like the use of tagging memories with emojis; possible solution to use hashtags instead



- Adventures look like headings for memories rather than hardware memories. Thisconfused the user and created a disconent between content; possible solution is to give each memory a title

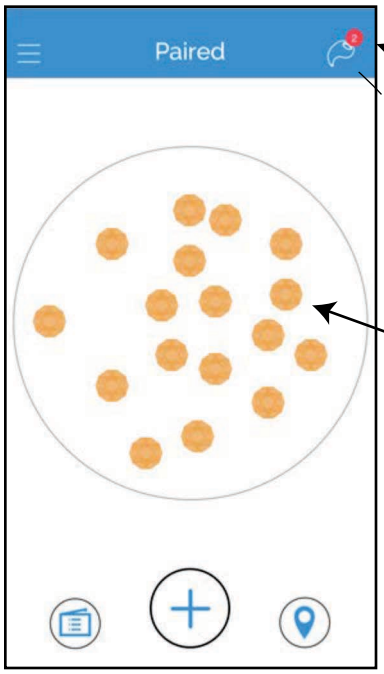
- Edit adventures and memories button should be made more visible. Users could not easily identify where the edit button was located; possible solution is to place the edit button near the comments on the bottom left.

- Comments do not feel warm or conversaitonal. They are also not visible enough. Possible solution would be to make the comments seem more like message threads.



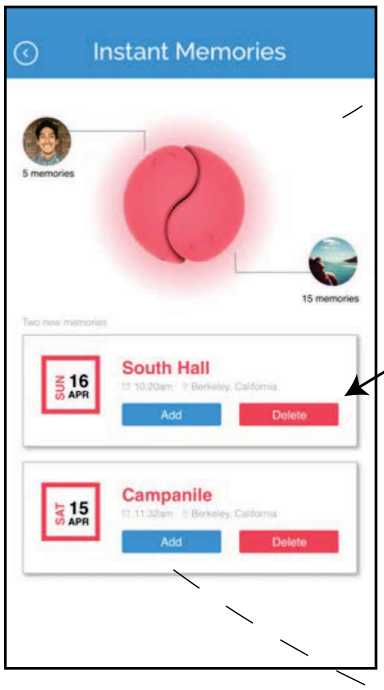
Iteration 3

Key findings from the third iteration of the user interface design

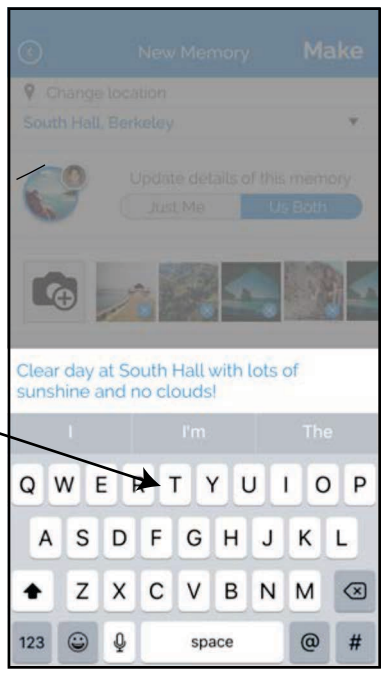


- 2 out of 3 users correclty identify the top right button as taking the user to the hardware button screen; possible solution is to briefly explain this functionality in on-boarding

- 2 out of 3 users cannot accurately identify that the orbs in the visualization each represent one memory; poor results can also be due to the lack of interactivity in the prototype; possible solution to color code and align imagery with current charm look/feel

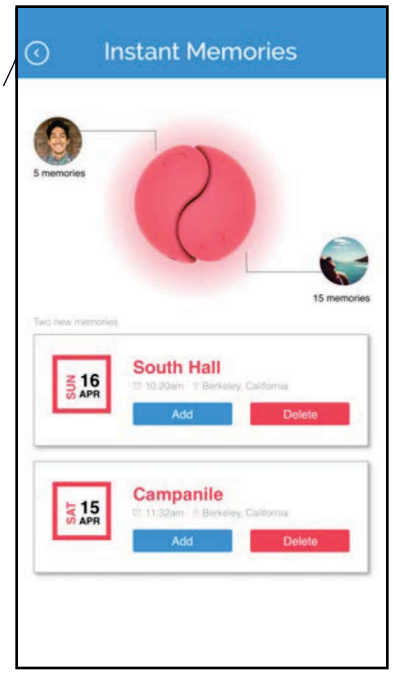


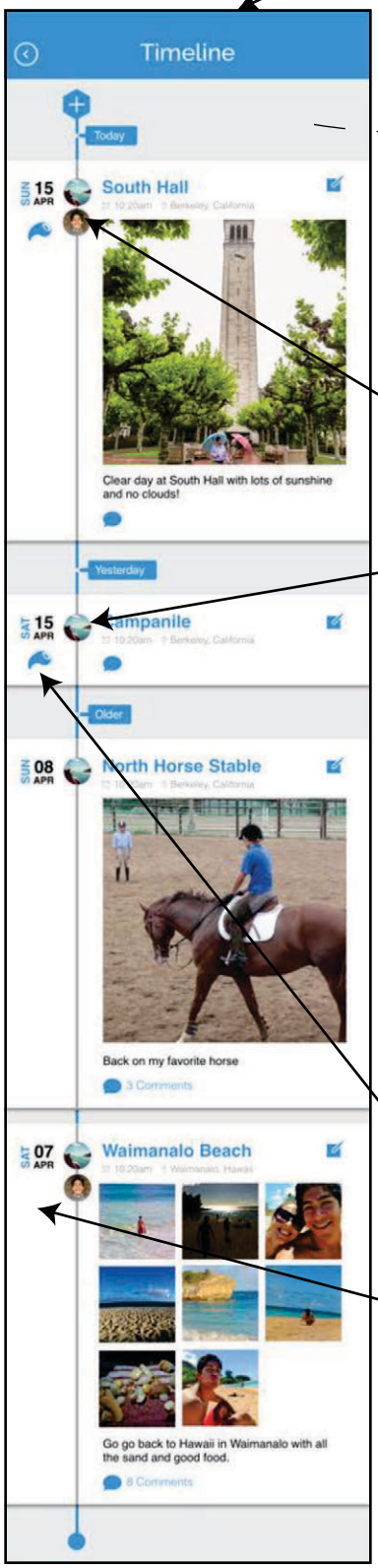
- All users understand that the instant memories are made from clicking the hardware button. However, 2 out of 3 users were confused who made the instant memories: the user or the partner; possible solution is include explanatory text since there is enough real estate



- 3 out of 3 users want a done or enter button for the completion of text in the text box

- 2 out of 3 users did not perfectly navigate to the timeline screen from the hardware page





- 3 out of 3 users are confused who made what memory. After additional prodding, they all figured it out. Once the user actually uses the application this could cease to be a problem. possible solution could be to add an additional identification object or varied coloring

- 2 out of 3 users are confused what the charm icons are at first. All users acknowledge that they like knowing who created the memory. Possible solution could not make imagery of the hardware charm more consistent through the application