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CSE 134B - Homework 1
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This document provides an overview of a potential web-application that is going to be designed and implemented in the scope of the course CSE 134B (Winter 2017) taught by the instructor Professor Thomas Powell.

Executive Overview

Motivation

Our proposed application is called Memento. People love to travel, and there are many different places out there to explore. We wanted to create an application that will allow the user to input the places that they have visited and store all of the data in a dictionary format so that they can always recall it or change any information on it.

Solution

The users have the option to select a region they would like to visit and the application will populate a list of popular places that they could visit. This application is analogous to an album book that will allow the user to store data of the places they've been as a collection of their memories. The application will be tailored for each user's unique experiences with the places they have visited by providing a very generic topic and information field for them to input to help them remember their memorable experience. Future features of this application can allow users to share the information in their Memento application with other users, and have a world map with pin points of locations they've been or want to go. This application will be geared as a comprehensive travel memory book for the user, something that could only be offered through generic applications right now. When a user wants to create an entry about a place they have just visited, they will be allowed to edit these fields:

Image - User will be allowed to upload a picture of the place as a thumbnail for the entry.

text field - User will be allow to enter the name of the place they have just visited.

text field - User will be able to tag their experiences, multiple tags are allowed and are delimited by spaces.

text field(optional) - User will be allowed to input an optional description about their experiences.

number field - User will be able to rate the place from 1-10, with 1 being the worst.

ordinal field - The user will be able to choose from a list of countries where the place is located at.

boolean - The user can change this value to visited or not visited to help them keep track.

User Personas

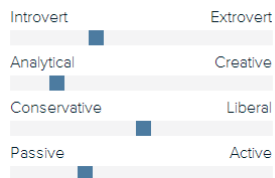
Alvin Jones



"Every step must be planned"

Age: 35
Work: Full Time
Family: Single
Location: Wisconsin
Character: Geek

Personality



Shy Meticulous Analytical Lazy

Goals

- Doesn't have a strong goal in mind
- Wants to become more decisive as his new year's resolution
- Wants to work on his personal project of creating a levitating chair
- Eventually wants to make a clean break from his life

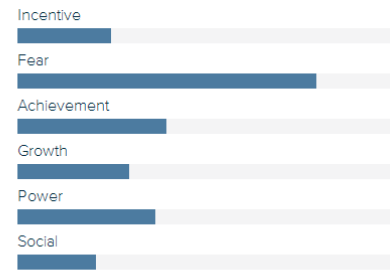
Frustrations

- His boss and many of his coworkers step on him because he has a hard time saying no
- Often feels like he doesn't know where his life is going
- Wishes he could travel more, but he is scared of change

Bio

Dill likes to travel and likes to meticulously plan out his trips. However, he is indecisive and is often unsure of what places he would like to visit. He wants to use Memento to plan out an entire vacation before deciding on an itinerary. He eventually wants to quit his job and travel the world.

Motivations



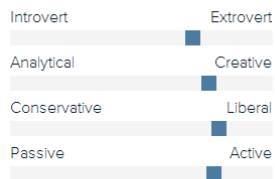
Jacqueline Smith



"There's nothing better than traveling the world"

Age: 21
Work: Student
Family: Relationship (boyfriend)
Location: Los Angeles
Character: Dreamer

Personality



Impetuous Headstrong Free-willed

Goals

- Wants to graduate and travel the world as a journalist in the future
- Wants to go on a road trip with her friends before she graduates
- Eventually wants to document some world crisis
 - Aims to pay off her college debt by 30

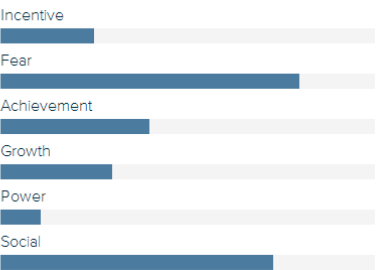
Frustrations

- Struggles with money and can't travel as her current job doesn't pay her enough
- Has her accumulating debt in the back of her mind
- Sometimes has issues with her boyfriend and doesn't know what's gonna happen after they graduate

Bio

Jacqueline is a poor college student who loves to travel but doesn't have the money. Wants to use Memento to keep track of all the cool places she finds on instagram, so that she can recall the cool places. She can also use instagram to store pictures of the places she's been too, but instagram doesn't offer the flexibility that Memento has in terms of input fields and the ability to recall the information easily. Jill wants to be able to create her own personalized album for the places she has been and wants to go with basic personalized information about that place.

Motivations



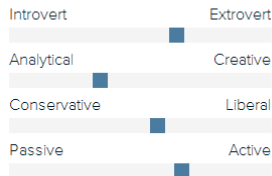
Phil Greenfield



"Hard work and determination will lead to success"

Age: 45
Work: Full Time
Family: Married with kids
Location: New York
Character: Family-Oriented

Personality



Ambitious Family-Oriented Stressed

Goals

- Wants to retire at a young age to spend time with his family
- He must secure an important deal with a large company so he can be promoted
- He wants to travel to the seven wonders of the world
- Wants to become the manager of his own business

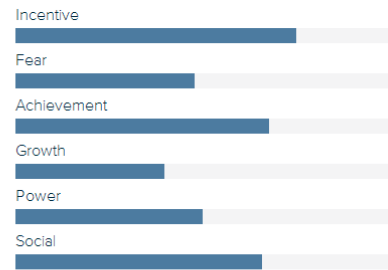
Frustrations

- Gets stressed out at work often because of long hours
- Can't be with his family as much as he'd like because of work
- Wants to travel more often but can't because his company pressure him to avoid vacation days

Bio

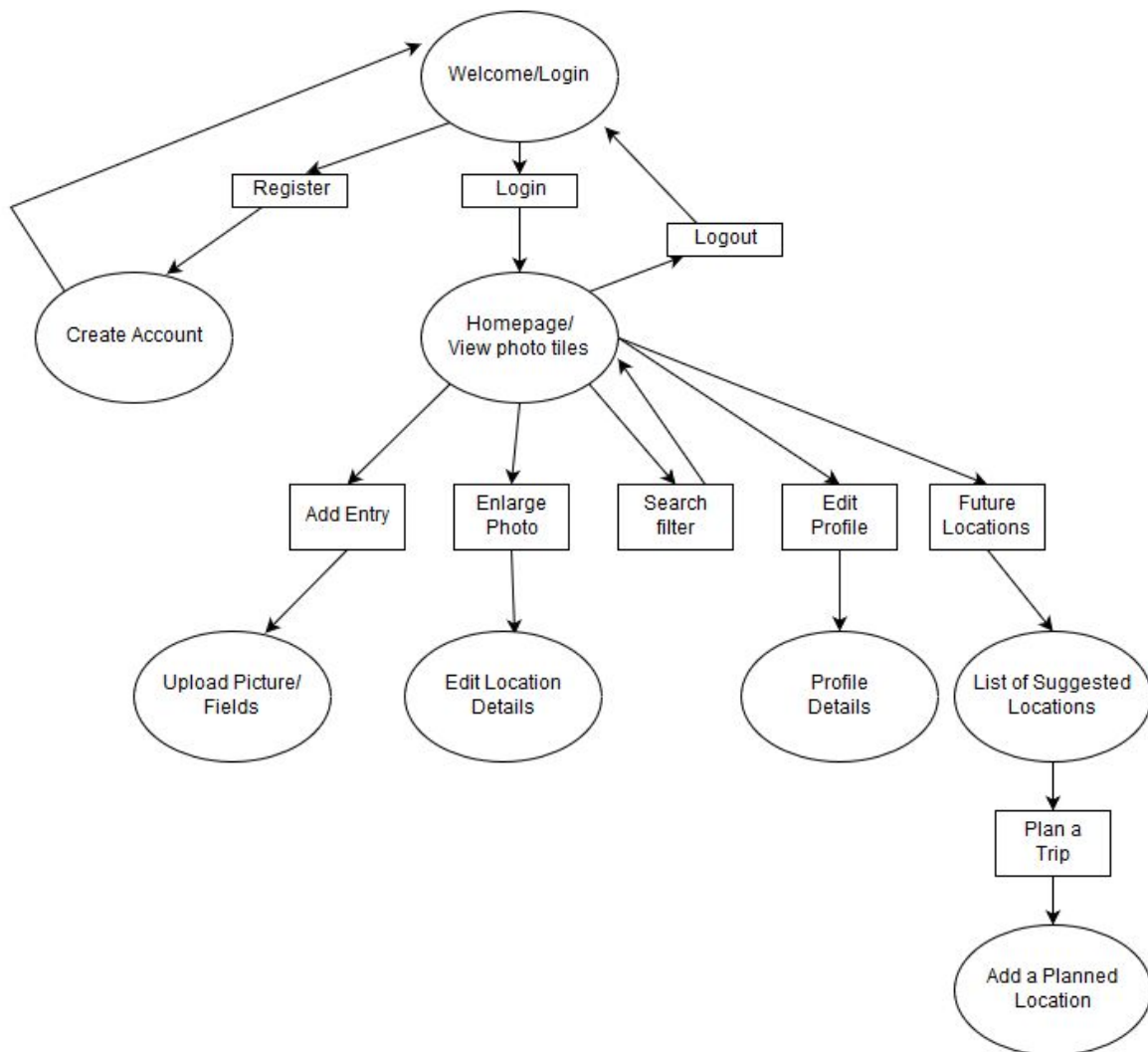
Phil is regular guy who takes a vacation a year, and likes to take photos as memories of his past trips. However, he realizes that he often misplaces the photos in old flash drives, and sometimes just pictures themselves fail to bring him back to his experiences. Phil would like Memento to not only aggregate his vacations in a single, easy to access app, but also write down what he experienced and felt at the time he took certain photos, for his own memories.

Motivations



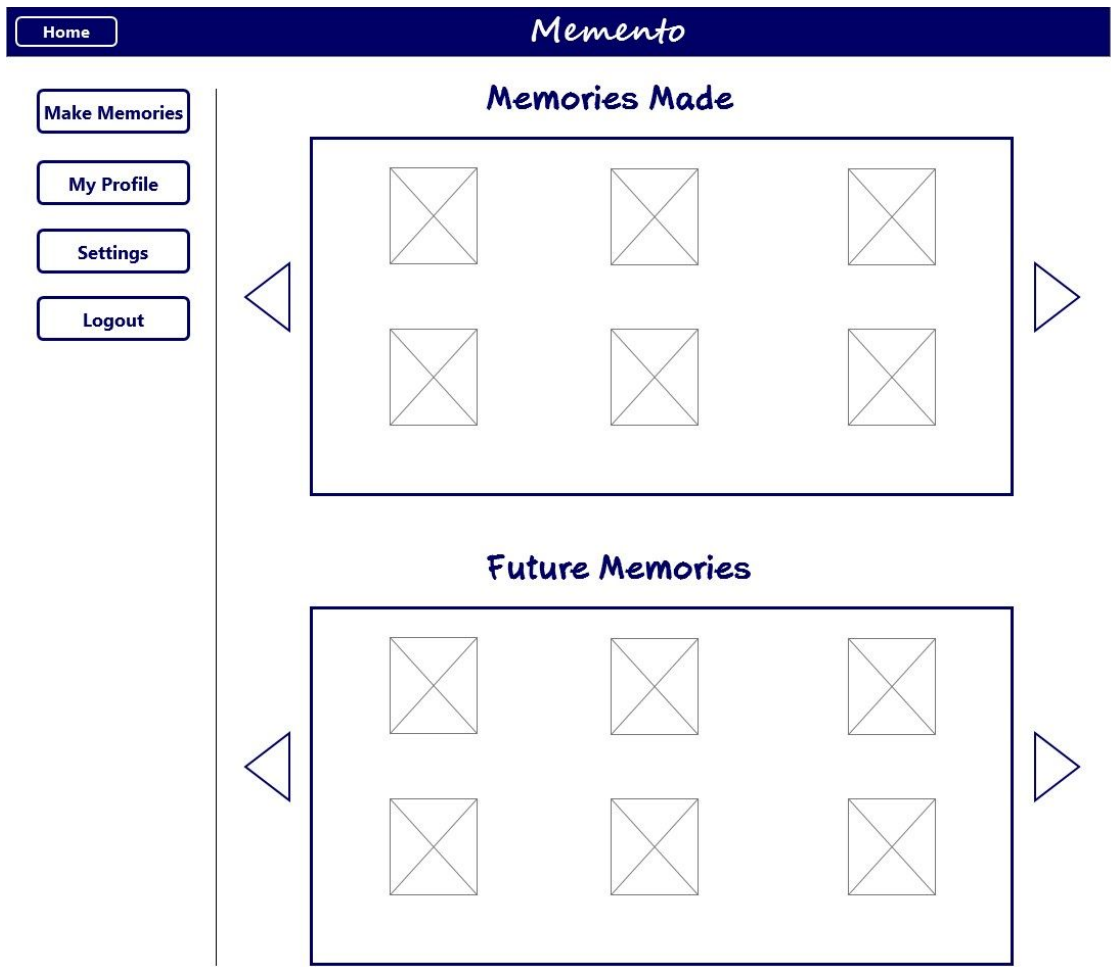
Logical Flow Diagram

Ovals = screens/modals, rectangles = actions



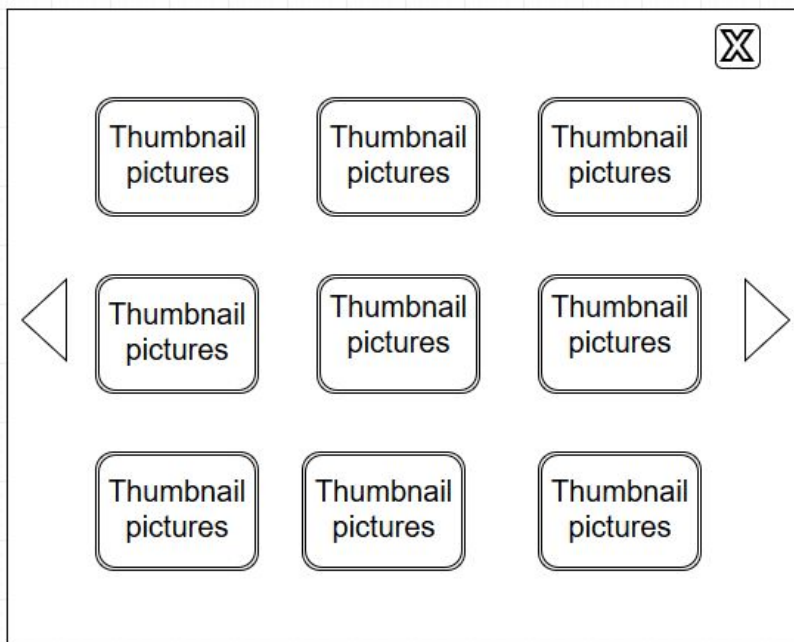
Sample Screens and Wireframe

HOME PAGE:

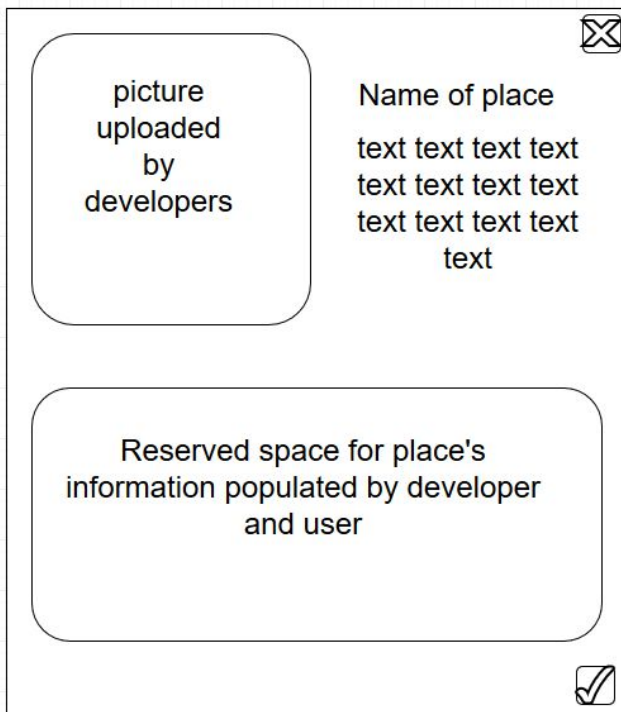


FUTURE TRIPS PAGE:

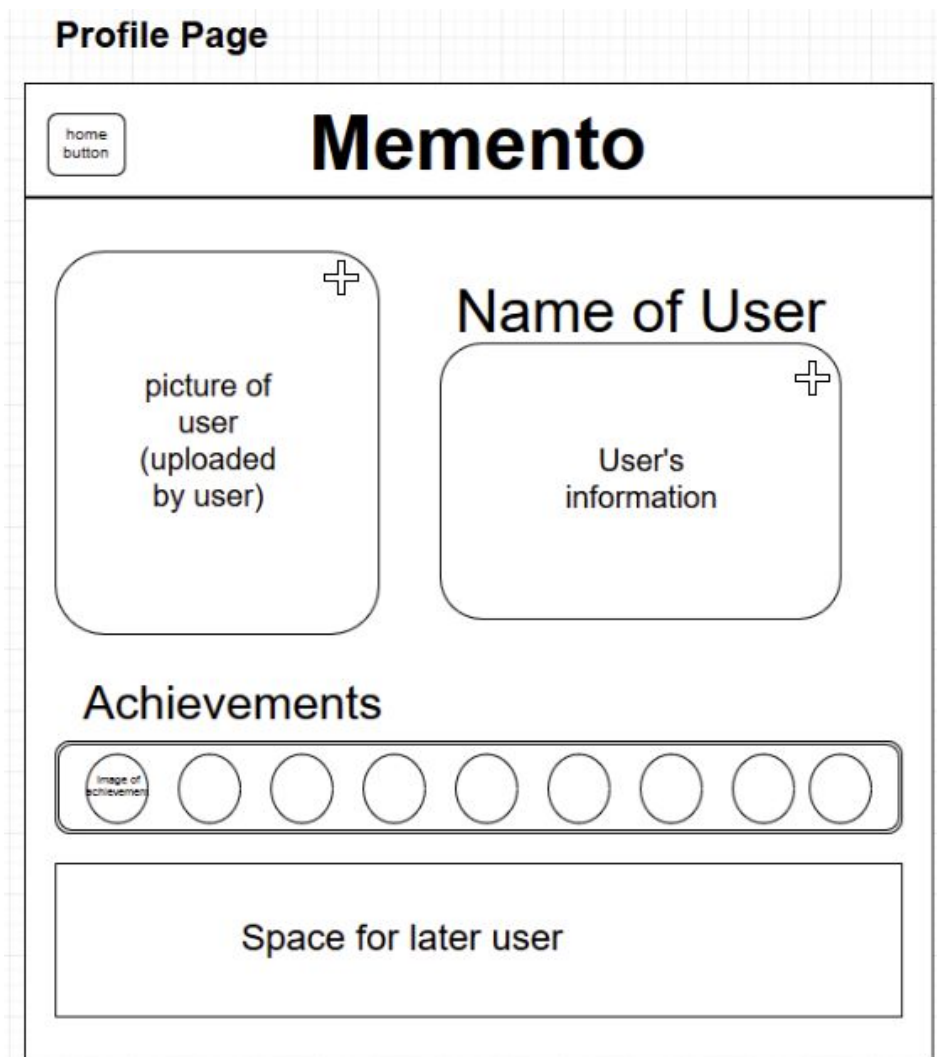
modal for future memories



Popup when clicking tile for future memories



PROFILE PAGE:



VIEW/EDIT ENTRY PAGE:

View/Edit Enlarged Entry Screen

Photo

Name:
Description:

X
EDIT

Misc. Fields

ADD ENTRY PAGE:

Add Entry Screen

Please upload
a photo

Enter the name of this location
Describe your memory

Back

Misc. Fields

LOGIN LANDING PAGE:

Memento

REGISTER PAGE:



Memento

Register

Strengths/Weaknesses/Risks/Execution

Strengths:

- Serves as a platform for users to store their past experiences
- Users can plan future vacations with the application
- Separates itself from other photo-storing platforms by catering to travel-specific memories and streamlining usage

Weaknesses:

- Requires user to manually populate the database with places the user has been
- Effort user puts in when initially inputting places has a direct effect on the user's experience
- Caters towards a specific audience that enjoys traveling and documenting
- Displaying many images could be slow depending on the user's bandwidth and connection

Risks:

- Execution in terms of differentiating our application from similar application like Instagram, Pinterest, Facebook, Google Plus.
- Privacy issues of our photo storage. If we get hacked, users' photos can be accessed and stolen.
- Also there is an issue of scalability and whether to limit heavy users' on the amount of data they can store on our servers, for example if they uploaded super high quality photos and have visited many places. Photo storage can also be a problem as whether we should compress the photos before storing and whether the original quality should be kept. Depending on our choices for this, loading times may become a problem.

Execution:

- Using Firebase for backend infrastructure that allows for basic CRUD
- Developing a web application and mobile application
- Plan to maintain a list of the most popular vacation destinations in order streamline 'memory creation' process
- Plan on limiting the image size that users can upload in order to minimize database storage usage and improve load times
- Plan on caching the most frequently accessed images to further speed up loading times