

# PORTFOLIO

Yewen Tang

Smart  
Star  
P1-4



IMPS  
P9-12



Dragon  
Go  
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Health  
Marathon  
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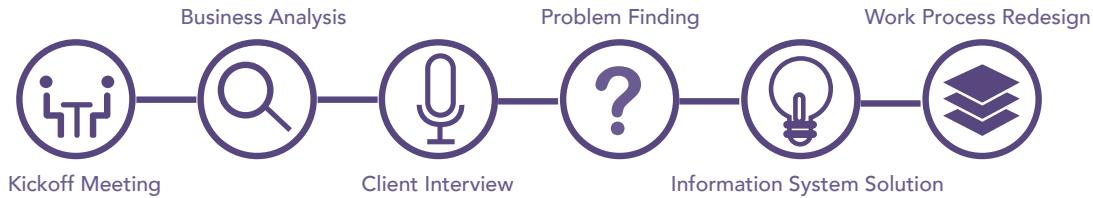
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# Smart Star

— an intelligent IT system designed for NorthStar Career

Academic Project  
Team: Alvin He, Xiang Liu  
Client: NorthStar Career  
Role: Interview & UX Design



## Project Overview



### Client Profile

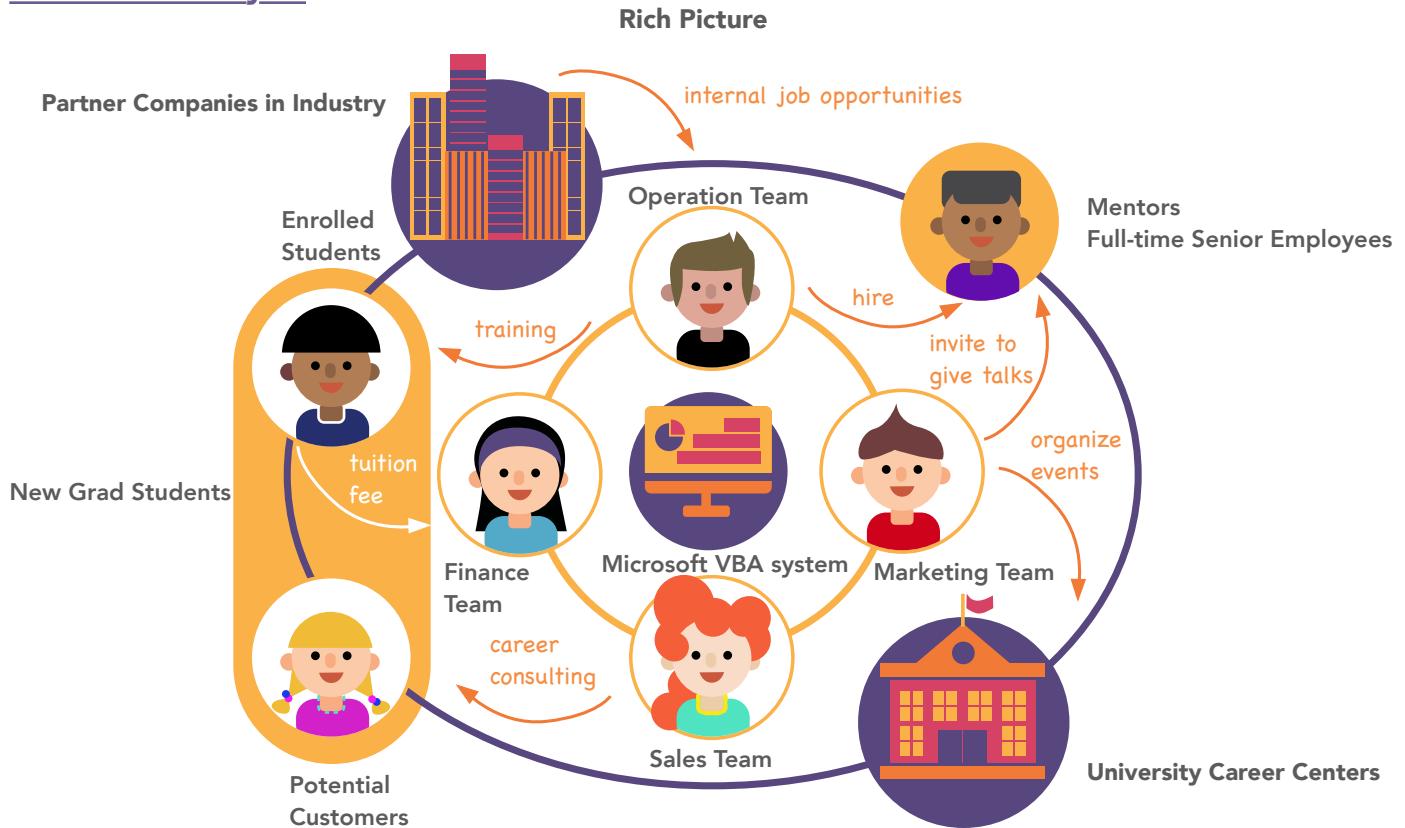
NorthStar Career is a career consulting company with the headquarter located in Chicago, and branches in Los Angeles and Philadelphia. The mission of the company is to help international students to achieve their career goals. Through the company's one-to-one mentorship program, mentees have access to its professional mentor network and a structured curriculum of engaging courses with industry experts.

### Business Goal

NorthStar Career planned to turning from a traditional career consulting company into an online training agency in the future 5 years. A new IT system is required to help the company be prepared for the future opportunity of expanding business, enrolling more students and implement new product lines.



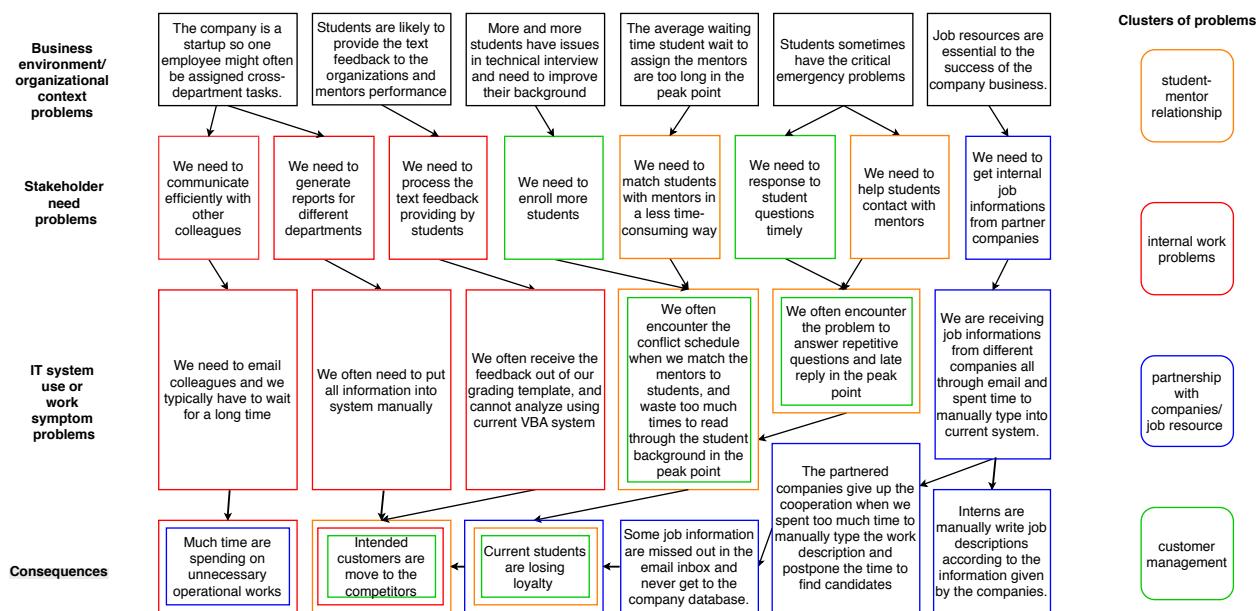
## Business Analysis



## DAILY TASKS & PROBLEMS

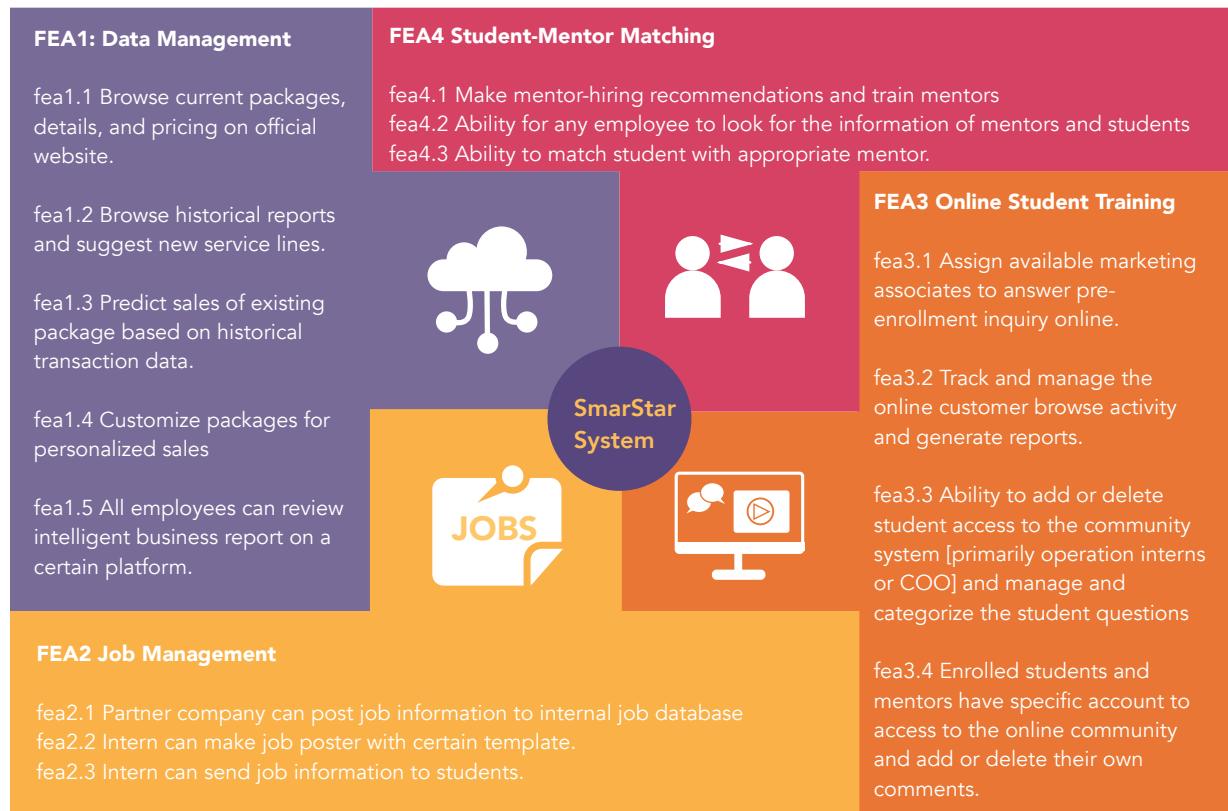
Stakeholder Analysis			
PROPOSED SOLUTIONS	Interns	COO (Chief Operating Officer)	Marketing & Sales Associates
	<p><b>Interns</b></p> <ol style="list-style-type: none"> <li>Need to answer questions in the student group chat. Many <b>questions are repetitive</b>.</li> <li>Need to keep track of the course quality by collecting feedback after class. The <b>communication with leader is through email, cannot get real-time reply</b>.</li> <li>Need to help with the preparation of marketing materials. <b>Sometimes the system failed to update the latest data</b>.</li> </ol>	<p><b>COO (Chief Operating Officer)</b></p> <ol style="list-style-type: none"> <li>Take charge of building relationships with companies in the industry. <b>Partnership is not easy to maintain</b>.</li> <li>Take charge of hiring appropriate mentors and train them. <b>The training process is similar but labor intensive</b>.</li> <li>Will receive job information from partner companies. <b>Sometimes emails go to junk mails so important job opportunities are missed out</b>.</li> </ol>	<p><b>Marketing &amp; Sales Associates</b></p> <ol style="list-style-type: none"> <li>Sell training package to student, sometimes customize private package. Customized sales are <b>hard to be kept record</b> in the VBA system.</li> <li>Match student with mentor. <b>The matching process largely depends on the knowledge of sales person. Many aspects to evaluate so the process is time-consuming</b>.</li> <li>Organize online and offline marketing events.</li> </ol>
<ul style="list-style-type: none"> <li>Online student community that allows students to ask and answer questions and share information</li> <li>Intranet or other alternatives</li> <li>New information system with instruction manual</li> <li>Job posting system that enables the partner companies to share job information safely and timely</li> <li>Mentor training protocol</li> <li>Automated student-mentor matching system</li> <li>Customized package interface that helps with the sales information record</li> </ul>			

## Cause-effect Analysis

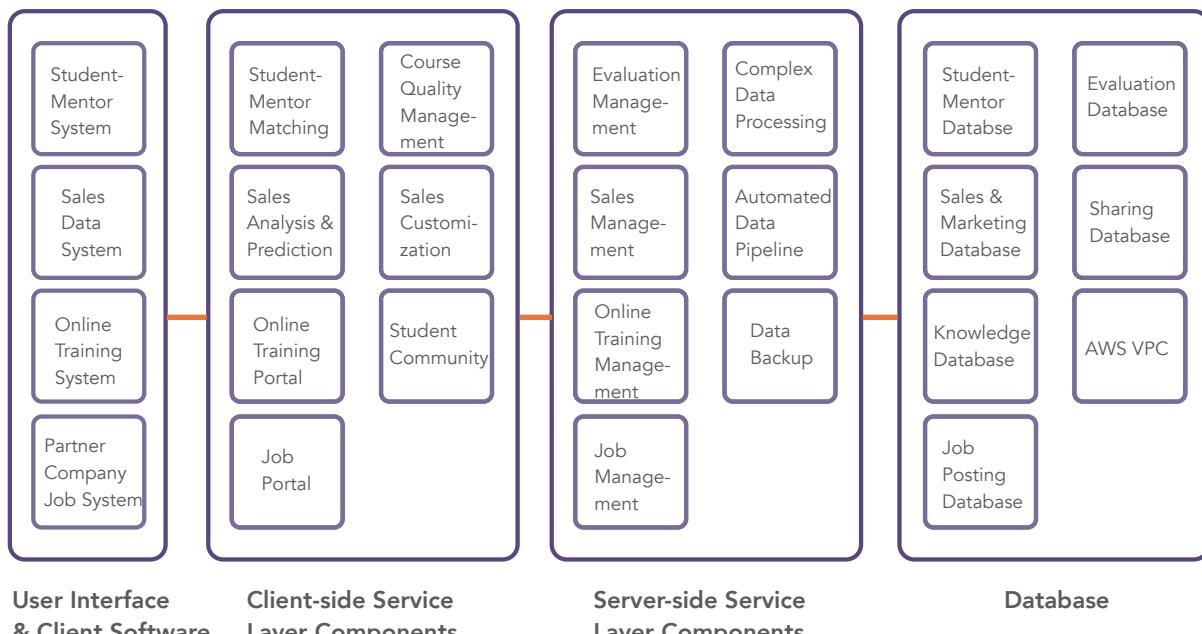


# Information System Solution

## New System Feature Diagram



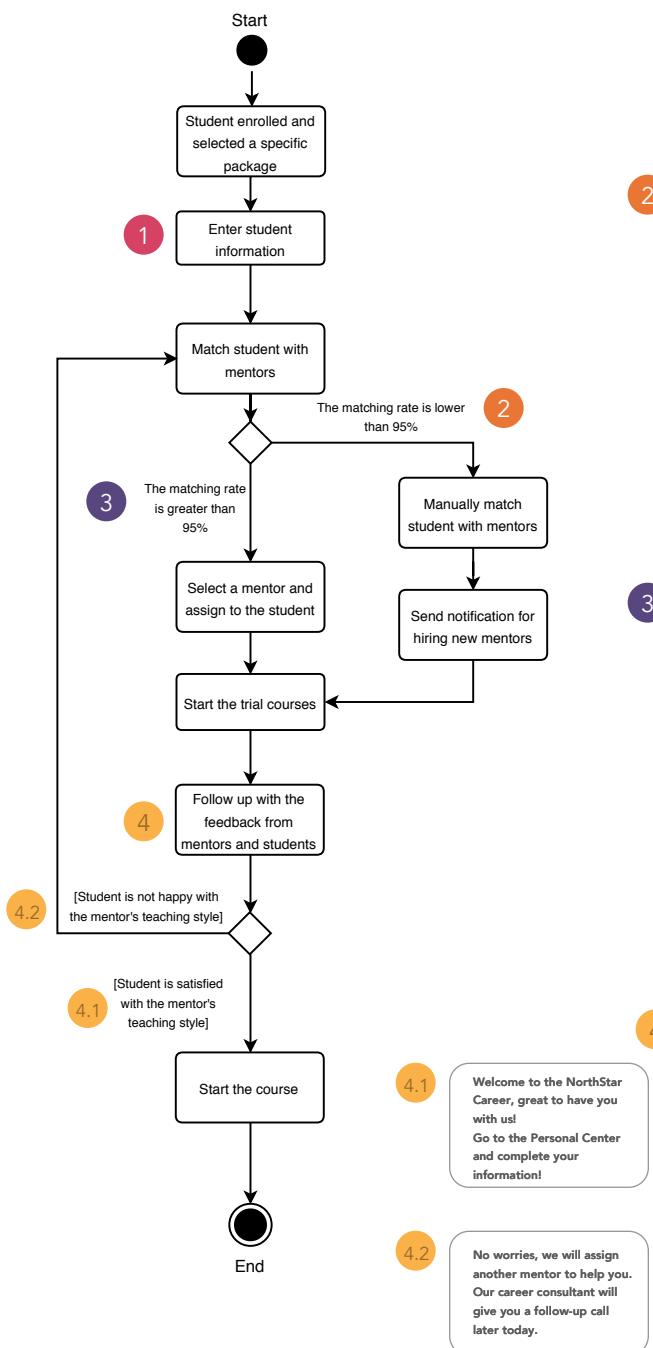
## Physical Software Architecture



# User Interface Design

Although this project mainly focuses on the System Design and Analysis, we would like to show the client how the front-end interfaces might look like.

Therefore, we selected the use case **(career consultant) matching student with mentor** to show the corresponding user interfaces.



**Screenshot 1: New Student Information**

This screenshot shows the 'New Student Information' form. It includes fields for First Name, Last Name, Birthday, Background (with a dropdown menu showing 'Accounting'), Dream company (checkboxes for Google, Facebook, Amazon), and an Others text area. There are 'Save & Match' and 'Cancel' buttons at the bottom.

**Screenshot 2: Matching results**

This screenshot shows a message: 'Oops... No mentor matched! Please select a mentor for the student manually and send a notification to the hiring team.' It displays a notification box for 'Student xxx failed to match with any of our mentors....' and a 'Send to HR' button. Below are four mentor profiles with names and availability checkboxes. Buttons for 'Assign to student' and 'Cancel' are also present.

**Screenshot 3: Matching results**

This screenshot shows four mentor profiles with names and matching rates: 98%, 98%, 95%, and 95%. Each profile has availability checkboxes for '12/1/2018 12:00' and '12/18/2018 12:00'. A 'Matching Rate' section highlights the top two mentors. A 'Send to student' button is shown below the profiles.

**Screenshot 4: New Student Feedback**

This screenshot shows the 'New Student Feedback' form. It asks if the student is satisfied with the mentor (radio buttons for Yes and No). It has fields for Background, Attitude, and Teaching Style. A question 'How do you like your mentor?' with a text area and 'Submit' and 'Cancel' buttons is also present.

# Health Marathon

Personal Project

— a goal-driven habit-forming app that helps you live a healthy life



## Problem Statement



A chronic disease, as defined by the U.S. National Center for Health Statistics, is a disease lasting three months or longer. About **40 million** Americans are limited in their usual activities due to one or more chronic health conditions. By 2020, the number of Americans experiencing at least one chronic condition is expected to increase to **157 million**; **81 million** will have multiple chronic conditions.



In the attempt to reverse this trend, a focus of health care toward developing health habits early in life is proposed by researchers. The problem is that **how can we help people make a sustainable health plan and form health habits effectively?**

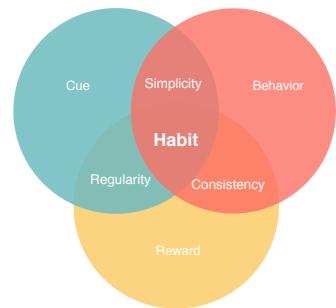


The industry size of health and fitness product in 2017 is **5.5 billion** and is expected to be **14.6 billion** by 2023.

Thanks to the **technological advances in medical devices** and **growing preference for wireless connectivity among healthcare providers**, people can choose from many smartphone-based healthcare and fitness apps.

## Takeaways from current health and fitness app/website

	Representative	Great features	Need to improve
Health data tracking apps	MyFitnessPal	<ul style="list-style-type: none"><li>new user survey to identify the goal and plan</li><li>calorie calculator</li><li>progress data dashboard</li></ul>	<ul style="list-style-type: none"><li>it requires too many steps to enter the meal information</li><li>most activities are self-driven</li></ul>
Health information websites	WebMD	<ul style="list-style-type: none"><li>powerful searching tools (symptom checker, pill identifier, etc.)</li><li>plenty of news feeds</li></ul>	<ul style="list-style-type: none"><li>interface is glossy. It will be used by people when they need certain information, and not likely to be used in quotidian life</li></ul>



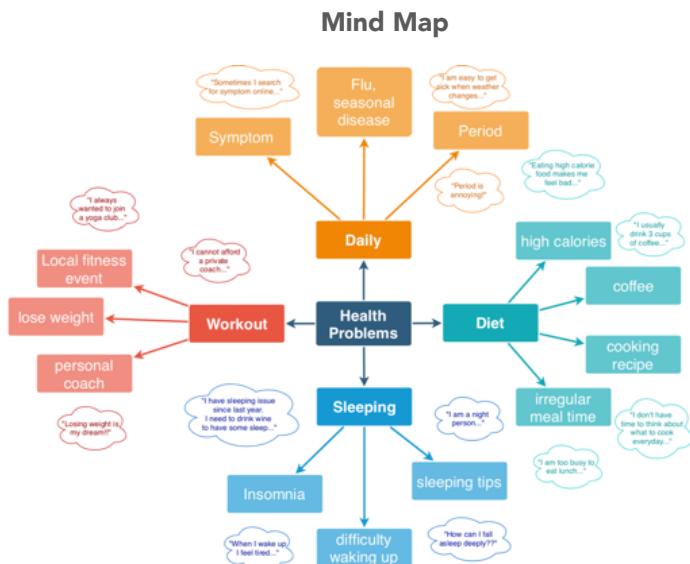
Overall, the applications/websites mentioned above integrate various features that are useful in making people active in health and fitness activities. However, in terms of a habit-forming app, we need to focus more on the conditions for forming habits—**simplicity, regularity and consistency**.

## User Research

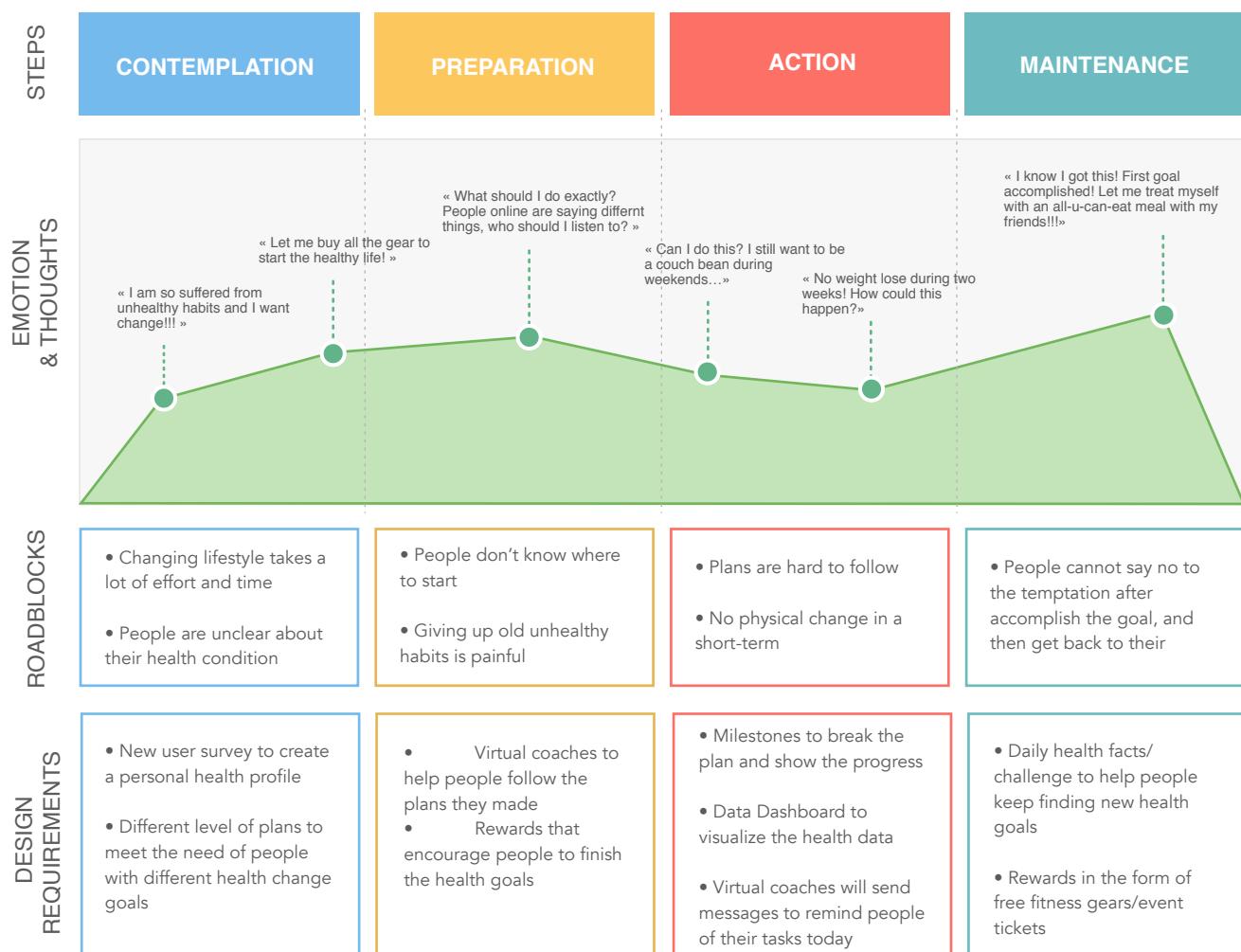
The interview and questionnaire keywords and selected notes are synthesized in the mind map and the mental model of changing health habits.

This mind map helps to identify four aspects that people care about: **daily health, workout, diet and sleeping**.

The mental model shows the four steps (**contemplation, preparation, action and maintenance**) in the way of changing health habits, and the corresponding **emotion & thoughts, obstacles, and design requirements**.



**Mental Model of Changing Health Habits**

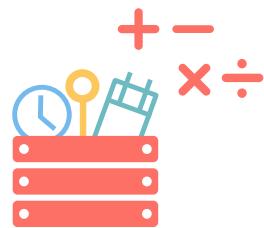


## Design Concept



**Personal coach taking care of every aspects of your healthy life**

With the AI technology, the virtual coach will ask/answer questions, give advices and keep track of your health situation.



**"Omnipotent" tool box**

Various tools to explore: reminder & alarm, health calendar, period calculator, calorie calculator and so on and on!

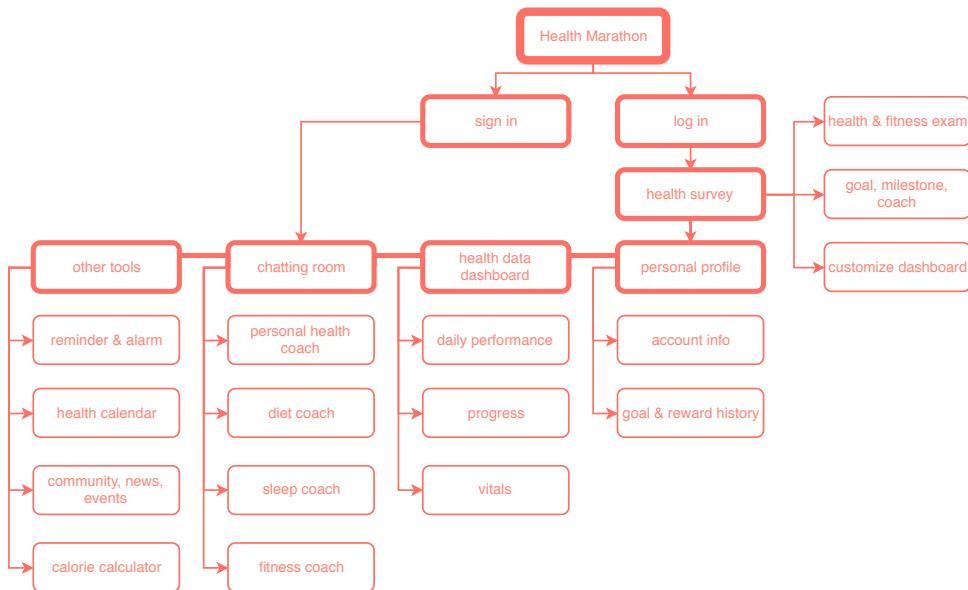


**Set your own goal; every finisher is a winner!**

Set your first goal by finishing the new user survey; reach the milestones one by one, and you got this!

## Product Design

### Wireframe

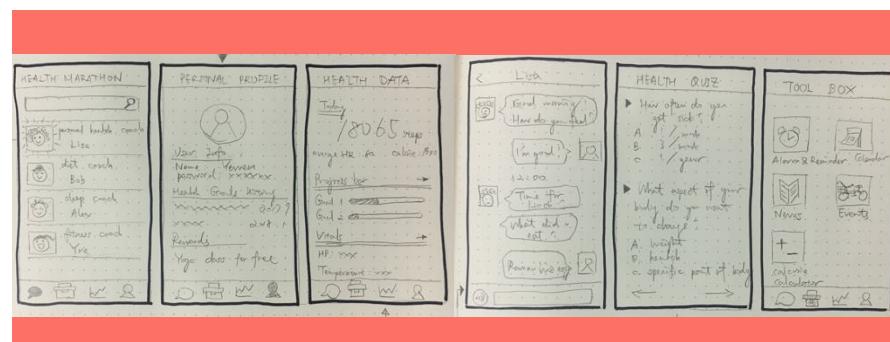


### Logo Design



**Health Marathon**

### Sketches



## High Fidelity Prototype

**Health Survey**

Welcome to Health Marathon

Finish the new user survey and complete your personal profile

**Health & Fitness** **Goal & Coach** **Dashboard**

Q8: When do you planned to accomplish the goal of losing 20 pounds of weight?  
A. 1 month  
B. 3 months  
C. 6 months  
D. 1 year

Back Next >

**Personal Profile**

**Personal Profile**

**Account Information**  
User Name: Yve  
Password: \*\*\*\*\*  
Email: yvetang0304@gmail.com

**Health Goal History**  
Losing 20 pounds of weight  
—10.08.18-12.08.18

**Goal Finisher Rewards**  
Free Yoga Class @ Zeezout Center  
12.08.18

**Personal Coaches**  
Fitness Coach: Lisa  
Diet Coach: Dylan  
Health Coach: Bobbie  
Sleep Coach: Tammy

### 1. Sign in & take the new user survey to complete the personal profile

Three parts survey helps the user know better about his/her body, and set a feasible goal.

**Health Data Dashboard**

**Health Dashboard**

Today  
**18065 steps**

Average HR: 78 Calorie: 1000

**Progress Bar** **Detail**

Goal 1: Losing 20 pounds of weight

Goal 2: Sleeping well

### 3. Use the health dashboard to keep track of daily performance

Dashboard provides an overall picture of daily health and fitness performance. The progress bar shows clearly how far to reach the goal.

### 2. Explore the tool box

Tools are easy to open and close, finish one task within two or three clicks.

**Tool Box**

**Tool Box**

**Set an alarm/ reminder**  
8:00 AM Time for breakfast  
10:30 PM Time for sleep  
+ Add new alarm

**Check the Health Calendar**  
DECEMBER

S	M	T	W	T	F	S
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	21
22	23	24	25	26	27	28
29	30	31				

+ Calculate the calorie  
+ Check health & fitness news/events

### 4. Chat with virtual coaches & make progress every day

Four types of virtual coaches in the chatting room will interact with the user by asking questions and providing advices. The user can either type in texts or choose from the given suggested answers.

**Chatting Room**

**Health Marathon**

Health Coach Bobbie  
Drink more water...

Diet Coach Dylan  
What did you eat for lunch?

Fitness Coach Lisa  
Do you need suggestions about...

Sleep Coach Tammy  
It's time for sleep. Try to relax...

**Chatting Room 001**

**Health Coach Bobbie**

Drink more water, Yve!

Remind me later Will do Okay! Thanks

Here is a new healthy habit for you:  
Try look outside the window during break.

Great idea I will take it No, thanks

I'm feeling good today!

**Chatting Room 002**

**Diet Coach Dylan**

Today is veggie day!

Any suggestion? I quit... Okay! Thanks

Explore the salads ... It's time for lunch!

What did you eat for lunch?

Beef salad with juice!

**Chatting Room 003**

**Fitness Coach Lisa**

Do you need suggestions about workout plan?

Any suggestion? I quit... Okay! Thanks

Explore the workout... Start workout?

Yoga class! 15-min pump Jogging outside

I lose some weight today!

**Chatting Room 004**

**Sleep Coach Tammy**

Time for sleep, Yve!

Remind me later Will do Okay! Thanks

Here is a sleeping suggestion for you:  
Try light a scented candle before sleep.

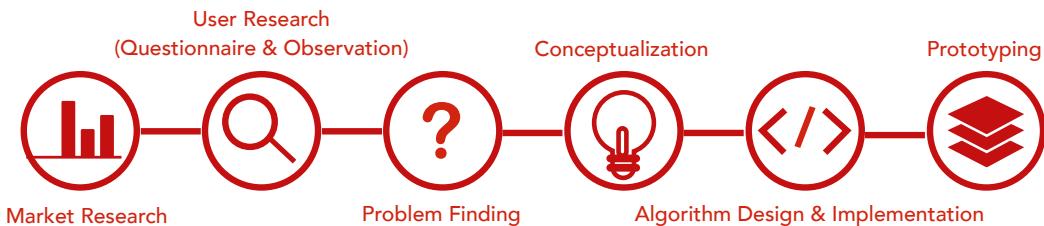
Great idea I will take it No, thanks

Play some soft music...

# IMPS

— Indoor Map for Path-planning in Stores

extended from  
the Academic project of class  
Introduction to Artificial Intelligence



## Problem Statement

According to the US Department of Commerce, in 2018, the retail e-commerce sales is estimated to be **over 10%** of the total retail sales. The percentage keeps growing from **4%** in 2009.

These statistics show two things: **in store shopping is still dominant but online shopping is booming.**

**How can we improve the in-store experience to benefit both consumers and brick-and-mortar retailers?**

## User Research

The first step is  
to study the  
**user shopping behavior.**

Shoppers can be roughly categorized into **six types:**  
**impulse shopper,**  
**bargain hunter,**  
**educated shopper,**  
**brand loyalist,**  
**browser** and  
**practical shopper.**

By asking probing  
questions such as

"Could you describe a  
typical experience of in-  
store shopping?"

"What do you think of  
shopping? What matters  
to you the most?"

"What would ruin the  
whole experience?"

we collected many stories  
and synthesize the findings  
into the diagram.

### **6 types of shoppers and their pain points**



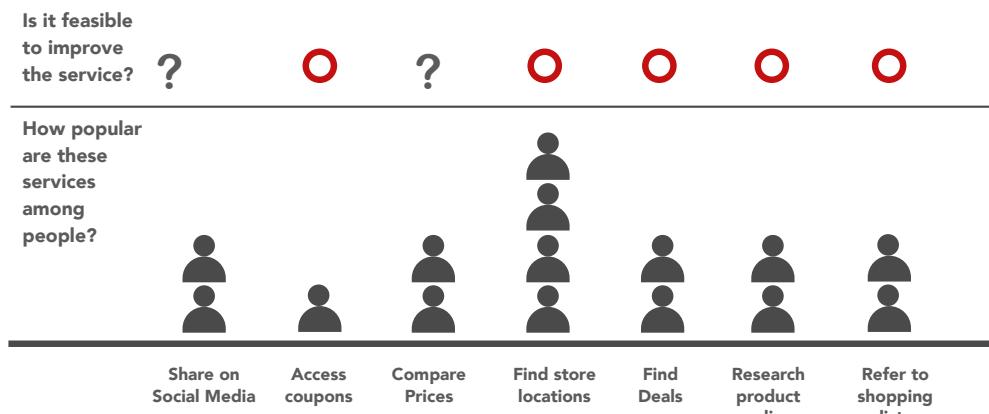
The second step is to compare the online shopping experience with that in store. The interesting point is that people use many kinds of online services during in-store shopping, which inspired me to design a mobile-based product.

### Online shopping vs In-store shopping matrix

	Online shopping	Offline shopping
Advantage	<ul style="list-style-type: none"> <li>Wide range of merchandise</li> <li>Transparency about inventory levels (available merchandise)</li> <li>Free shipping and return</li> <li>Price comparisons→ relatively lower price</li> <li>Online customer review</li> </ul>	<ul style="list-style-type: none"> <li>Shopping as a social activity</li> <li>Able to see and touch the merchandise</li> <li>On-the-spot sales</li> <li>No waiting time for delivery</li> </ul>
Challenge	<ul style="list-style-type: none"> <li>Difference between the picture of merchandise online and the real merchandise received</li> <li>Payment security issue</li> </ul>	<ul style="list-style-type: none"> <li>Difficulty in finding the right size, style and color</li> </ul>

### Online services used during shopping in store

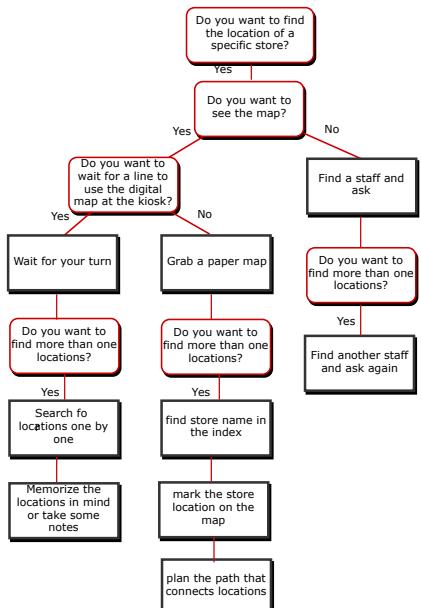
The survey is done by 15 people and they are allowed to choose multiple services they have used. The results below show the ratio of people.



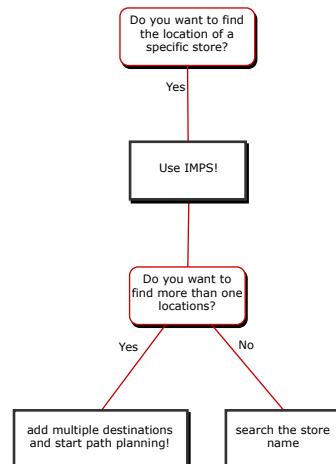
By comparing the feasibility of improving the service and the popularity of the service among people, we decided to make a map-based app: **IMPS (Indoor Map for Path-planning in Stores)**. We then observed the current use case of people using map in mall and try to optimize it into a use case in the ideal world.

### Observation: use of map in mall

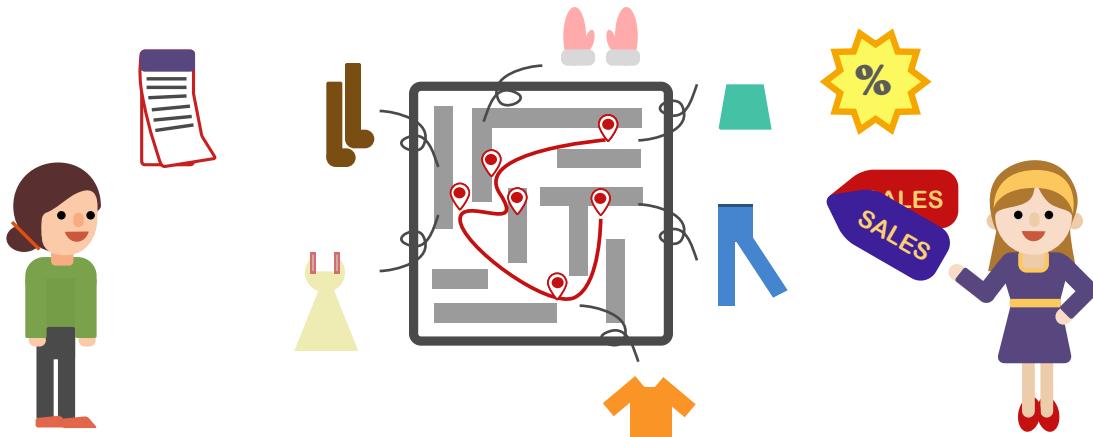
#### Current use case



#### Use case in ideal world



## Design Concept



Digital indoor map in hand:  
never get lost again in a big  
mall

IMPS provides customers with a digital map in which every store location is searchable.

Path planning feature: optimal path connecting all the must-go stores

Supported by powerful search algorithm, IMPS will choose the optimal path for the customers according to their specific preference.

Happy retailers:  
more deal exposed, more customer visits

IMPS shows not only the location of the store but also the deal and events on the map. Retailers can attract more customers with deals and post real-time updates to inform any changes.

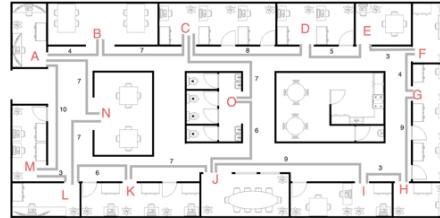
## Integrated Solution

The AI class project focus mainly on implementing the indoor path planning algorithm that finds the optimal path connecting multiple nodes, with shortest distance or shortest time.

### Approach:

- o Prepare an experimental map
- o Find the shortest single-stage path (the path connecting the start point and end point): A\* heuristic
- o Take into consideration another important impact factor: average visitor flow rate in certain area
- o Simulate the real in-store shopping scenario & design the model: math formulas
- o Combine single-stage paths to find the optimal multi-stage paths: multilayer dictionary

Experimental Map



A\*-based Algorithm

```
def AstarMulti(start, end):
    point = start
    visited = {start}
    gcost = {}
    hcost = {}
    pqueue = []
    gcostList = []
    hcostList = []
    nodeCost = 0
    possibleMoves = graph(point)
    for elem in possibleMoves:
        if elem in visited:
            continue
        pqueue.append(elem)
        gcost[elem] = point_info[point][0]
        pathLength = point_info[point][1] + 2 * node_info[elem] - 2
        hcost[elem] = heuristics[num(elem)] - num(end)
        totalCost = gcost[elem] + hcost[elem]
        gcostList.append(gcost[elem])
        pqueueCost.append(totalCost)
        visited.append(elem)
        gcostTotal = nodeCost

    if point == end:
        break
    return visited, gcostTotal

def popLowest(pqueue, pqueueCost, gcostList):
    index = pqueueCost.index(min(pqueueCost))
    return pqueue[index], gcostList[index]
```

Multi-layer Dictionary

Node	Adjacent nodes	Path Information
A	B M N	distance waiting time distance waiting time distance waiting time
B	A C D	distance waiting time distance waiting time distance waiting time
C	B O D	distance waiting time distance waiting time distance waiting time
D	E F	distance waiting time distance waiting time
E	F G	distance waiting time distance waiting time
F	G H	distance waiting time distance waiting time
G	H I	distance waiting time distance waiting time
H	I J	distance waiting time distance waiting time
I	J L	distance waiting time distance waiting time
J	I O K	distance waiting time distance waiting time distance waiting time
K	J L	distance waiting time distance waiting time

## Path cost formula (considering average visitor flow rate)

## Evaluation

### Single-stage path planning

$$g(x, y) = w_1 * d(x, y) + w_2 * wt(x, y)$$

$$wt_1(x, y) = 0 \quad (0 < num_1 < 30)$$

$$wt_1(x, y) = \frac{(num_1 - 30)}{30} * 10 \quad (30 \leq num_1 < 60)$$

$$h(x, y) = w_1 * hd(x, y) + w_2 * hwt(x, y)$$

$$\text{path}(start, target) = \min \sum (w_1 * w(d) + w_2 * w(wt))$$

### Multi-stage path planning

$$wt(x, y) = w_2 * wt_1 + w_3 * wt_2$$

$$wt_1(x, y) = 0 \quad (0 < num_1 < 30)$$

$$wt_1(x, y) = \frac{(num_1 - 30)}{30} * 10 \quad (30 \leq num_1 < 60)$$

$$wt_2(x) = 0 \quad (0 < num_2 \leq 10)$$

$$wt_2(x) = \frac{(num_2 - 10)}{3} * 0.3 * 60 \quad (10 < num_2 \leq 30)$$

$$g(x, y) = w_1 * d(x, y) + wt(x, y)$$

$$\text{path}(x, y, z) = \min \sum (w_1 * w(d) + w(wt))$$

Weight	Number of people	Output path	cost
w1=1 w2=0 w3=0		A->M->L->K->J J->K->L->M->A	26
w1=1 w2=1 w3=0	Num1 (A,M) = 100 Num1 (L,K) = 100	A->N->L->K->J J->K->L->N->A	27
w1=1 w2=1 w3=0	Num1 (A,M) = 100 Num1 (A,N) = 100	A->B->C->O->J->K K->J->O->C->B->A	31
w1=1 w2=0 w3=1	Num2 (K at t) = 30 Num2 (K at t') = 9	A->B->C->O->J->K	31
w1=1 w2=1	Num1 (N,L) = 100 Num1 (M,L) = 100 Num1 (B,C) = 100	B->A->M->L->K K->L->M->A->B	46.333

## Prototype



**Mobile app:**  
scan the QR code and download it and sign in with your other social media accounts

The screenshots show the following steps:

- Scanning a QR code.
- Viewing a mall map with store icons and deal cards.
- Selecting a store icon to add a location.
- Viewing a mall map with multiple locations added.
- Choosing a starting point for path planning.
- Viewing a mall map with a path plotted between two points.
- Viewing a detailed path planning screen with step-by-step instructions.
- Viewing a history screen showing previous paths taken.

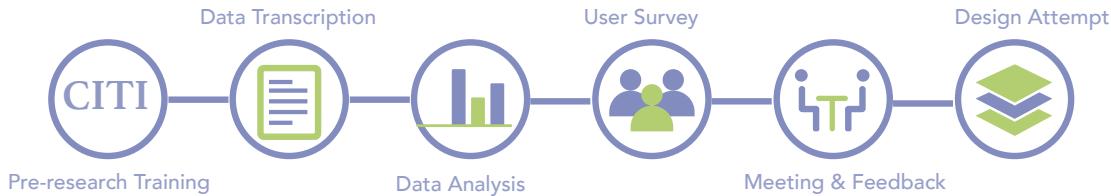
**Holiday special cart:**  
use the big screen on the cart to plan your shopping trip  
and free your hands



# Digital Medical Checklist

— Digital checklist for resuscitation room at Children's Hospital

Research project  
Team: Leah Kulp (PhD student)  
Advisor: Alexandra Sarcevic  
Role: Research Assistant



## Project Overview

The trauma resuscitation room in the hospital is a high-risk and intensive environment. The senior residents or nurses in the trauma team used paper checklists to organize the tasks and to take notes. However, the static paper checklists are not a good enough tool to help with the accurate decision-making process. Therefore, design and implement a digital checklist becomes a solution.

The digital checklist for trauma room is a collaboration research project of the IS4H lab at Drexel University and the Children's National Hospital at Washington DC. I mainly work on the analysis of paper checklists and use the results to inform the design of new digital checklists.

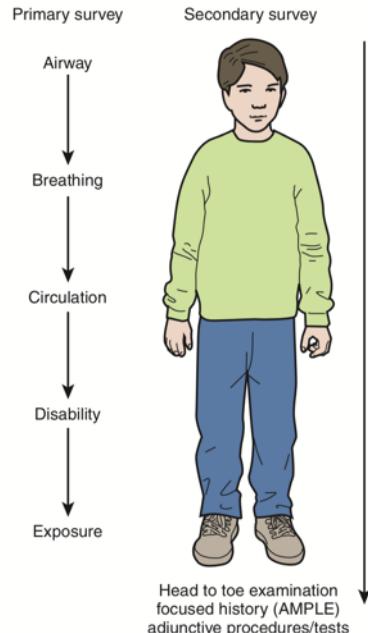
## Pre-analysis Work

### CITI training



- Human Subjects Research
- Biomedical Research
- Good Clinical Practice
- Responsible Conduct of Research
- Health Information Privacy and Security

### Advanced Trauma Life Support (ATLS) protocol learning



### Paper checklist transcription

unchecked items & notes taken by the leader

After doing the CITI training, I was able to view the checklist data with consent. The paper checklist used by the National Children's Hospital is designed according to the ATLS protocol. By transcribing the information on the paper checklist into a spreadsheet, we can move on to the data analysis.

## Analysis Findings & Design Opportunities

In this project, we used two types of methods, **quantitative one and qualitative one**, to study the use of checklist in resuscitation room.

By **processing and analyzing the datasets in the spreadsheet**, we are able to find out the factors that influence the use of paper checklist. We specially look at the **unchecked items and the notes taken**. As for unchecked items, we studied the **completion rate and frequency versus location**. The **interesting notes taken on the margin** inspire us to add new features to the checklist.

By **conducting user survey**, we figured out the **motivation and the strategy** of using the checklists, and also **different types of notes** the leader would like to take. These findings reveal the true needs of the checklist users. The findings and design opportunities are synthesized in the table below.

	<b>Selected Analysis Findings</b>	<b>Design Opportunities</b>
Various reasons for using checklist	<ul style="list-style-type: none"><li>• Notes taken on the checklists helped with <u>memory, decision making, archival purposes and following trends in patient parameters</u></li></ul>	<ul style="list-style-type: none"><li>◦ A big shared screen with highlighted notes in resuscitation room along with the checklist tablet</li></ul>
Different strategies when using checklist	<ul style="list-style-type: none"><li>• Most leaders prefer <u>checking off the corresponding checkbox immediately after each task was completed</u></li></ul>	<ul style="list-style-type: none"><li>◦ Voice input</li></ul>
Type of notes taken	<ul style="list-style-type: none"><li>• According to leaders, the information they will typically write down on the checklists are <u>pre-hospital information, exam findings, vitals, injuries, trauma man diagram, orders and post-trauma plan</u></li></ul>	<ul style="list-style-type: none"><li>◦ Highlight unchecked items</li><li>◦ Function: check all in the section</li><li>◦ Trauma man diagram in secondary survey</li><li>◦ Placeholder for vitals near the checkbox</li></ul>
Some interesting notes taken on the margin	<ul style="list-style-type: none"><li>• Besides the ones mentioned above, we observed that the notes taken down also include steps in process, list of body parts, and checkboxes lacking from the existing checklist.</li></ul>	<ul style="list-style-type: none"><li>◦ Highlight in-progress tasks</li><li>◦ Customized checkbox</li><li>◦ Pre-hospital information entry</li></ul>
Factors that influence the use of paper checklist in resuscitation room	<ul style="list-style-type: none"><li>• According to leaders, factors affecting the number of notes taken (listed from the most rated one to the least one) are <b>patient acuity, availability of necessary information, patient abnormalities and team effectiveness</b>.</li></ul>	

## Design Attempt

On top of the last version digital checklist designed by Alyssa, former student designer in the lab, we kept the entire color scheme and design style, and added several new features: **pre-hospital information form**, **human body diagram in secondary survey**, **customized new checkbox**, **checkbox item highlight/crossed out/circle/ in progress**.

**Procedure for using a digital checklist**

Step 1: Create a new checklist  
 Step 2: Pre-arrival plan  
 Step 3: Primary survey  
 Step 4: Vitals  
 Step 5: Secondary survey  
 Step 6: Prepare for travel  
 Step 7: Review unchecked items and submit checklist

- Place for notes on top of the checklist
- Note display next to the check item
- New function: certain item can be marked as [in progress/ circled/ crossed out/ highlighted]
- New function: pre-hospital information form (patient gender, age, mechanism of injury, time of the day)
- New function: add new checkbox with handwriting
- New function: two ways of view in secondary survey [list of body parts/ body diagram]

# Dragon Go

Personal Project

— Campus Life in One App



## Project Overview

Currently, a bunch of apps designed for Drexel students with different focus are launched but most of them are unknown among the students. Even if the students are aware of the available apps that can facilitate their life, they can't be bothered to download them one by one.

Dragon Go App is a Design Challenge project that aims to cover the most important on-campus need for Drexel students.

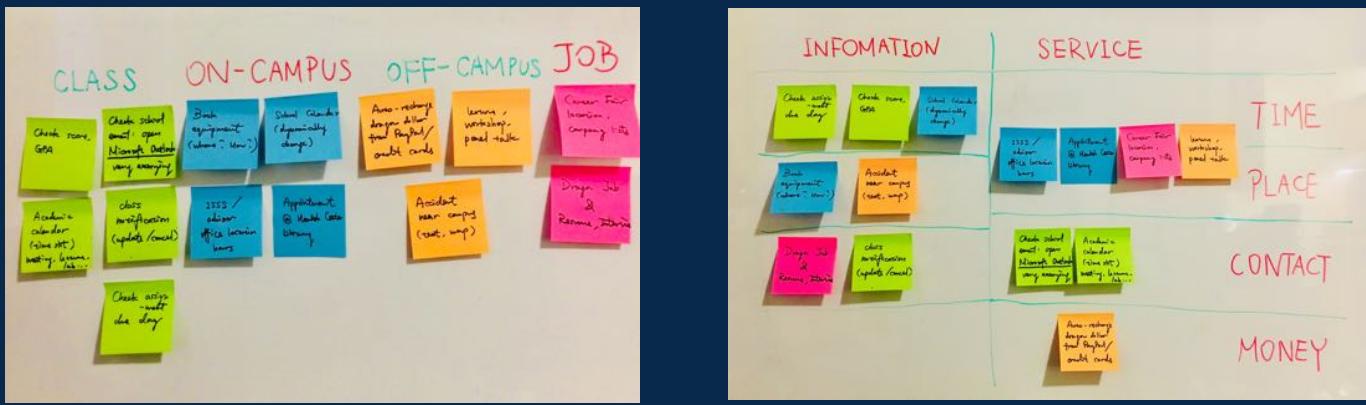


## User Research

### Participatory Design: Card-sorting

Participatory Design: Card-sorting				
Most frequent	> Less important			
Most Frequent	Check school email	Recharge Dragon Dollar	Check events on campus	Make appointments
	Check class schedule & location	Check assignment due day	Check professor /TA office hour	Book equipments
	Check near campus accident	Check score/ GPA	Contact advisor	
	Check Dragon Job	View interview information	What kinds of Drexel Apps/websites do you use?	
	View school calendar	How do you use the Drexel apps?		

## Affinity Diagram



The insights collected from user interview are separated into clusters.

The student activities are mainly about **class, on campus life, off campus life and job**.

Their needs can be roughly categorized into four: **time management, location finding, communication and money management**. Some needs are related to **information** while others **service**.

## Design Concept

### 1. Timeline + School Email = Efficient time management

All important dates automatically marked on timeline: quiz day, project due day, interview day... Students can also add an event to timeline from email.

### 2. Information in one map

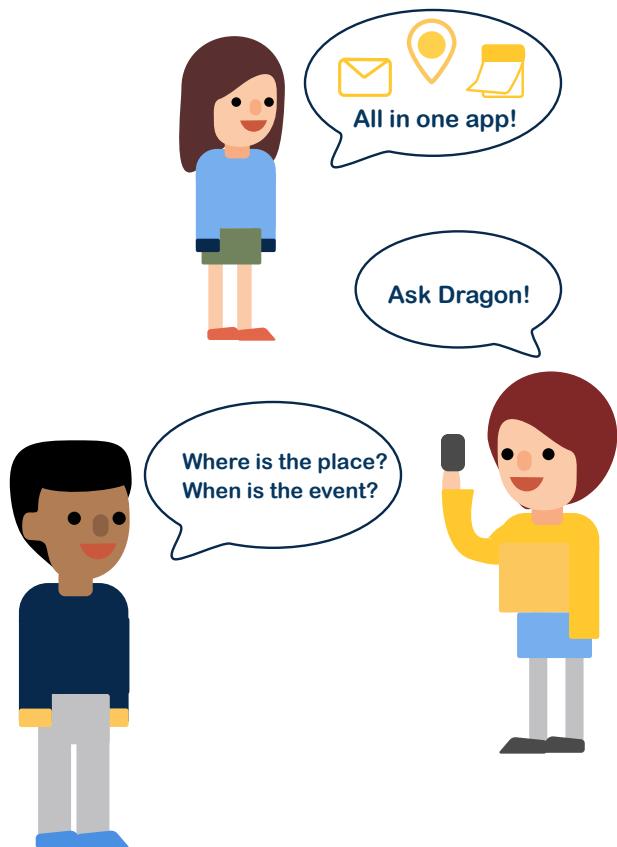
Search for locations on/near campus and learn about the open hours!

### 3. Ask Dragon whatever you want

The Drexel BBS allows students to share latest information and post questions.

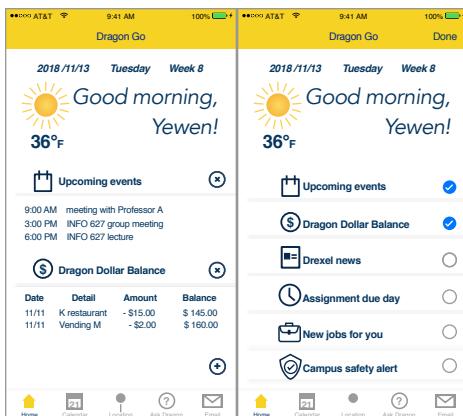
### 4. Clear dashboard, organized life

Sections that are displayed in dashboard includes dragon dollar, new job, class notification and saved events.



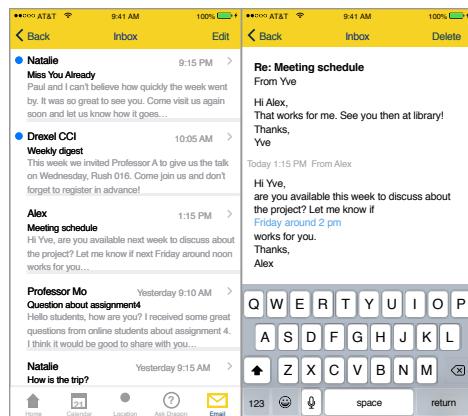
# Prototyping & Evaluation

## 1st Version Prototype



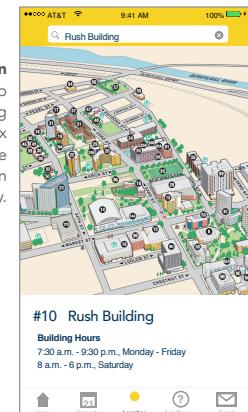
**Home screen**

- Greeting with date, academic week, weather and temperature
- Customizable dashboard with multiple choices of sections including upcoming events, dragon dollar balance, drexel news, assignment due day, new job, and campus safety alert.



### Email screen

- Traditional outlook email display format
- Time information in the mail text highlighted in blue, clickable to add the event on the calendar

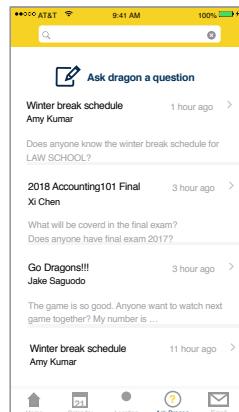


**Location screen**

- Official Drexel map providing building location with index
- Search by entering the keywords of the location or the name of faculty.

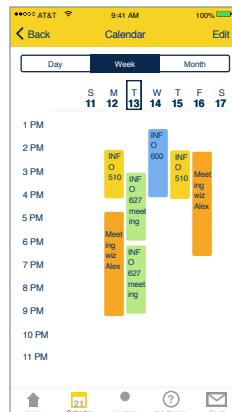
**Ask Dragon screen**

- Search an existing post or ask your own questions
- Threads listed in chronological order



**Calendar screen**

- Traditional calendar display format
- Three modes to display the calendar: day, week, and month



## User testing results

« Nice home screen, but not clear how to delete sections or add a new section...And I would like to put the Dragon Dollar section on the top if possible... »

■ Hard to edit, add, delete sections on the homepage

« The index number on the map is not helpful enough to find the location. I want more detail related to the location...»

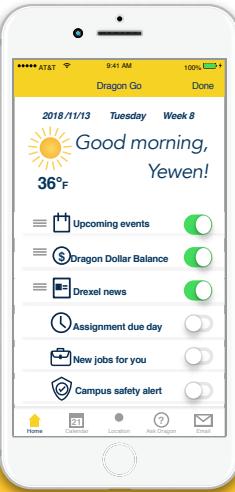
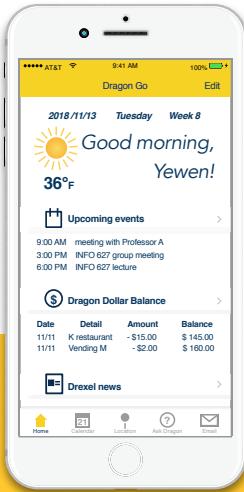
■ Need a clear location detail page

« I might want to save certain posts in the Ask Dragon BBS...And if I post a thread or something, I will use hashtags.»

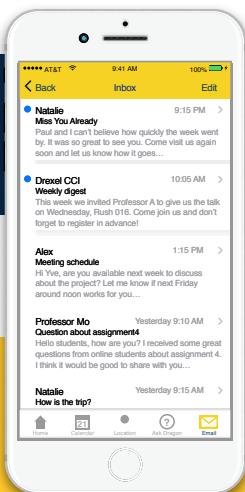
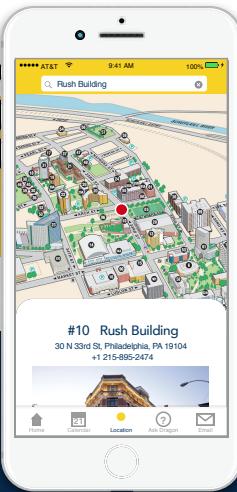
■ Save post feature in the Ask Dragon section

## Iteration: 2nd Version Prototype

**Good morning, Dragon!**  
All you care on campus in one glance...



**Find places? Check hours? Make appointments?**  
**There you are —>**



**Drexel Email embedded in Dragon Go!**



**Email to Calendar**  
**One step away from an organized life!**

**Ask Dragon whatever  
you want.**

