

# Team Advantage

Anqi Liao	Leadership
Ye Liu	Flexibility
Mingkai Lu	Creativity
Jiale Yu	<u>Adaptability</u>
Dongdong Lai	Resource

- Good Collaboration and Communication
- Adaptability and Flexibility
- Creativity
- Resources and Network

# Domian: Understanding our Health

1.

Jiale Yu

Minghai Lu

# BeatLeap

## Problem description

With the development of modern technology, children are increasingly exhibiting non-obese obesity in their daily life. This is a serious social health problem. How to keep children fit even in the digital age has become

ANQI LIUO

## KIDS MEAU

### Problem description

In the field I will be studying, childhood obesity, which was discovered through a literature review and a stop-motion video. The following figure shows the research method. I will focus on the following. Based on a review of relevant literature, I will identify the main factors that contribute to childhood obesity. Then, I will explore the causes of childhood obesity from the perspective of parents, children, and teachers. Finally, I will propose solutions and provide recommendations. As a result, I have delved deep into the causes of childhood obesity and proposed solutions. The periods of childhood obesity are discussed, as well as the various factors that contribute to childhood obesity and technological investments made by scientists and governments.

### Solution Connections

Considering the pervasiveness of childhood obesity, I propose exploring a comprehensive dietary, physical activity, and behavioral intervention. Technological solutions allow parents to customize their children's diet and exercise plans according to their needs. Integrated approaches to dietary composition and physical activity can help parents and children achieve better health. In addition, I will propose solutions, adhering to the principles of scientific research, to address the problem. I suggest further refinement to this technology. A more comprehensive approach to childhood obesity, dietary preferences, cultural dietary backgrounds, and individual dietary needs can be considered. In addition, such as the ability to assess food items for nutritional value and provide a more accurate meal recommendation. This would considerably aid parents and children in addressing the issue collaboratively.

## Interactive approach

Research is focusing similar virtual reality are more focused on social feature certain levels of specialization in my

**Figure 1:** In the class diagram for this system there are two main classes: 'Virtual Cursor' and 'Moving and Dodging'. 'Virtual Cursor' has two subclasses: 'Virtual Keyboard' and 'Virtual Mouse'. 'Moving and Dodging' has two subclasses: 'Moving' and 'Dodging'. 'Moving' has two subclasses: 'Jumping' and 'Running'. 'Dodging' has two subclasses: 'Hiding' and 'Diving'. There are also direct links from 'Virtual Keyboard' to 'Jumping' and 'Running', and from 'Virtual Mouse' to 'Hiding' and 'Diving'.

Ang Liu

# Cooking S

## 1. Problem

The problem I wanted to solve was to design an app that would help users practice cooking and create new recipes. Interface of this application is a simple one. You can use any kind of kitchen equipment, and then you can put it, ingredients processing and he ingredient button can quickly generate any variety and any quantity of dishes. And you can process food in various ways peeling, dicing, slicing and for the function of the warehouse, ingredients in any state.

choose recipes that come with import new recipes from outside, ill disassemble the recipe to previous operation for the user, each step has a score, and each link in the cooking process, evaluate and score the dishes these scores. Users can also not y recipe for free innovation.

## Research

### (a) literature Research

Following an extensive examination of relevant scholarly sources pertaining to the subject matter of children's weight, it has been determined that childhood obesity represents a significant concern for society. The physical and psychological well-being of children and adolescents is at risk as the medical breakthroughs continue. The severity of the childhood obesity problem is increasing. Upon further investigation of the causes of childhood obesity, it has been determined several key elements that contribute to the aforementioned problem. These include genetic factors, environmental factors, economic issues, dietary habits, and genetic susceptibility. Considering all these factors, I have provided to this topic by proposing a solution. As a result, government-led policies and educational establishments have developed a series of strategic plans and programs to effectively tackle this issue.

### (b) User Observations

The method of user observation will be employed to gain a deeper comprehension of the problem domain. This will involve monitoring the behaviors of users in their natural environment. This will help to identify the user challenges within that context. In order to acquire a more comprehensive understanding of the user, I will conduct observations of users in various settings, including but not limited to schools, amusement parks, retail malls, and similar environments.

Create more attractive interface

### References

Vatin, E., and Hajar, O. (2017). *Kids' Menu Game*. Proceedings of the 2017 International Conference on Information Technology (Prairie).

Skinner, A.C., Perrin, E.M., and Stratton, J.A. (2016). Prevalence of obesity and severe obesity in U.S. children, 1999–2014. *Obesity*, 24(5), pp. 1116–1123. doi:10.1002/oby.21510. URL: <http://onlinelibrary.wiley.com/doi/10.1002/oby.21510>

Reynolds, R. et al. (2018). Feasibility and principal components analysis of a mobile application to disseminate healthy messages to parents. *Health Promotion Journal of Australia*, 30(3), pp. 108–113. doi:10.1111/hpja.12954

Recipe

Concept map

DECO3550 Design Opportunity, Sem 2 2023

(no date) Obesity Evidence Hub. Available at: [www.evidencehub.org.au/collections/trends/adults-australia](https://www.evidencehub.org.au/collections/trends/adults-australia) (accessed: 30 August 2023).

National Health Survey: First Results, 2017–18 financial year (no date) Australian Bureau of Statistics. Available at: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release> (Accessed: 30 August 2023).

(No date) Researchrepository.rmit.edu.au. Available at: <https://researchrepository.rmit.edu.au/esploro/outputs/journalArticle/Improving-the-health-of-male-blue/9921862033401341> (Accessed: 30 August 2023).

# understanding our health

# Overweight Australian adults

# blue - collar worker

# Audience & Design Opportunity

## • Observation



## • Questionnaire

- 55% Mainly fast food
- 37% don't understand healthy food combinations
- 65% above normal weight

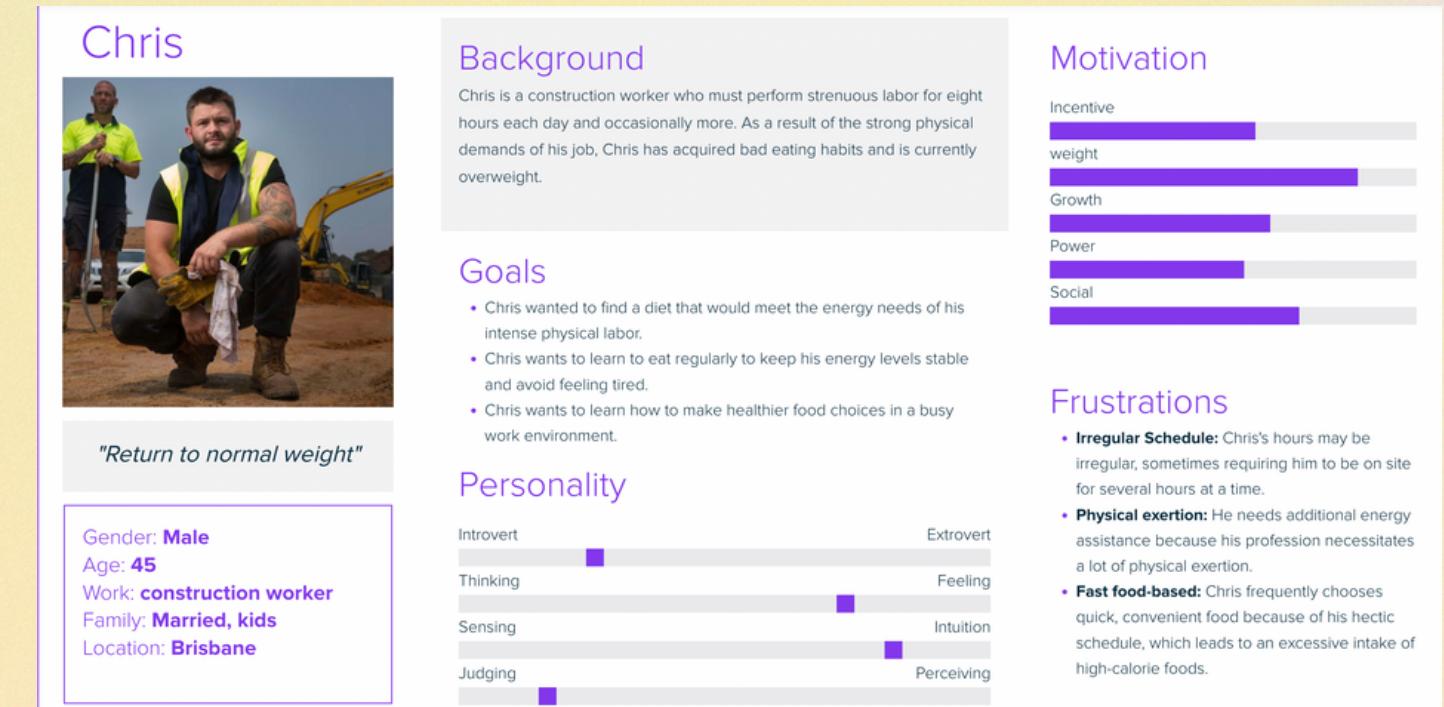
## • Literature Research

- 25% often skip breakfast
- 65% Consistent drinking and smoking

## • Descriptive (blue-collar)

- Lack of positive eating habits.
- Engaged in intensive physical labor
- Overweight

## • Persona



## • Design opportunities

- Provides advice on adapting to blue-collar diets
- Provides the nutritional structure of food and related data
- A platform for users to communicate and share dietary advice

# Design concept & Existing technology

## Design concept

### Monitoring eating habits

Give users feedback by recording their daily eating habits

### Analysing the nutritional structure

Analysing the nutritional profile of the user's daily diet based on their daily recorded diets

### Knowledge of nutritional intake

Provide them with nutritional intake knowledge to raise awareness of nutritional intake standards among the target population.

### Managing diet and physical health

Finally, the analysed nutritional profile of the diet is used to develop a diet plan for them.

## Existing technology



### Noom

This app that combines psychology and nutrition to help users develop healthy eating and lifestyle habits. It offers personalised guidance, progress tracking and supportive social interaction.



### MyFitnessPal

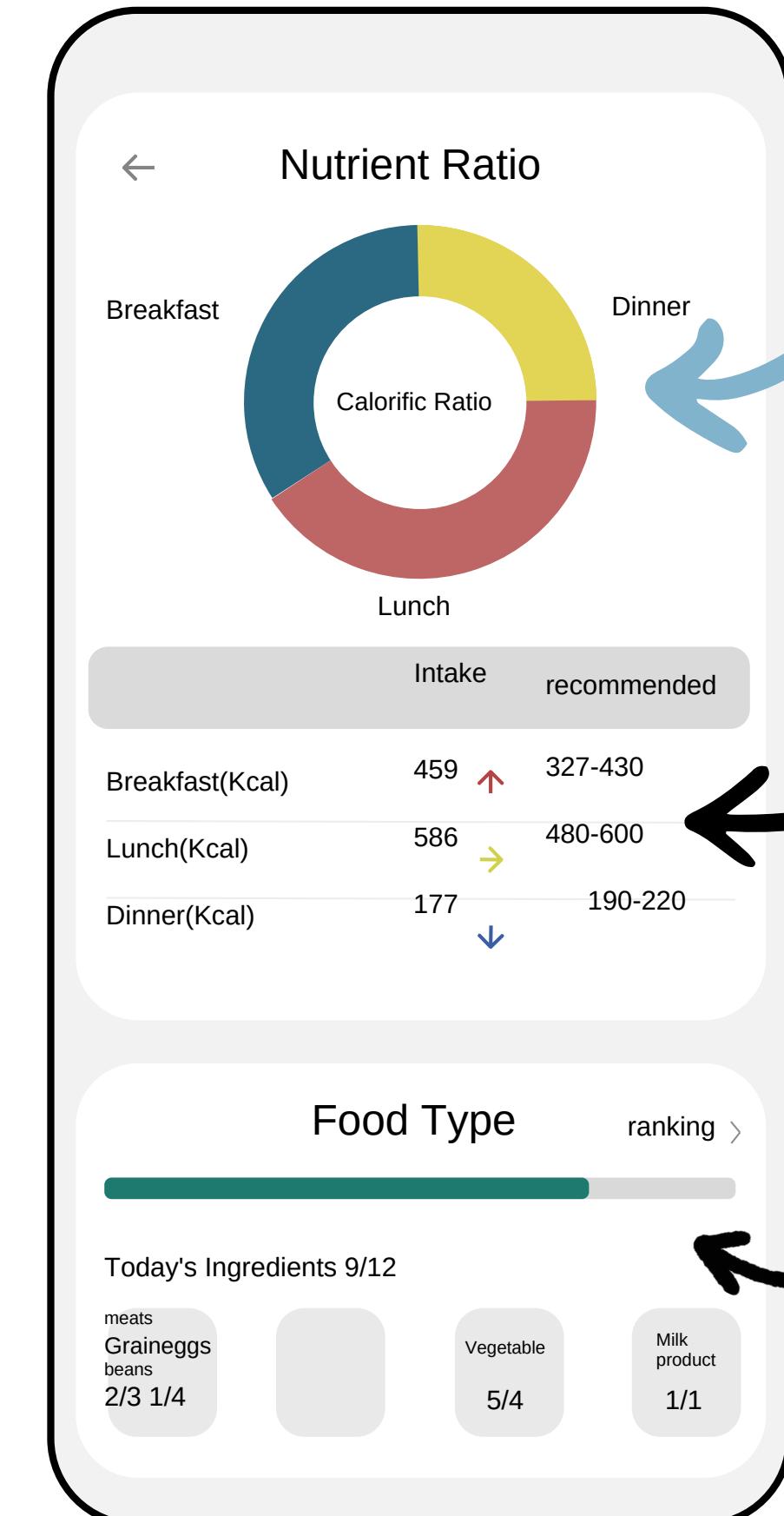
This is a very popular app that contains a large food database and allows users to track their diet and exercise. Users can set their own goals and customise their diet plans to suit their needs.



### Lose It!

This app creates a customised weight loss plan for users by analysing their age, gender, height, current weight and target weight. It also allows users to track their diet and exercise.

## Prototype

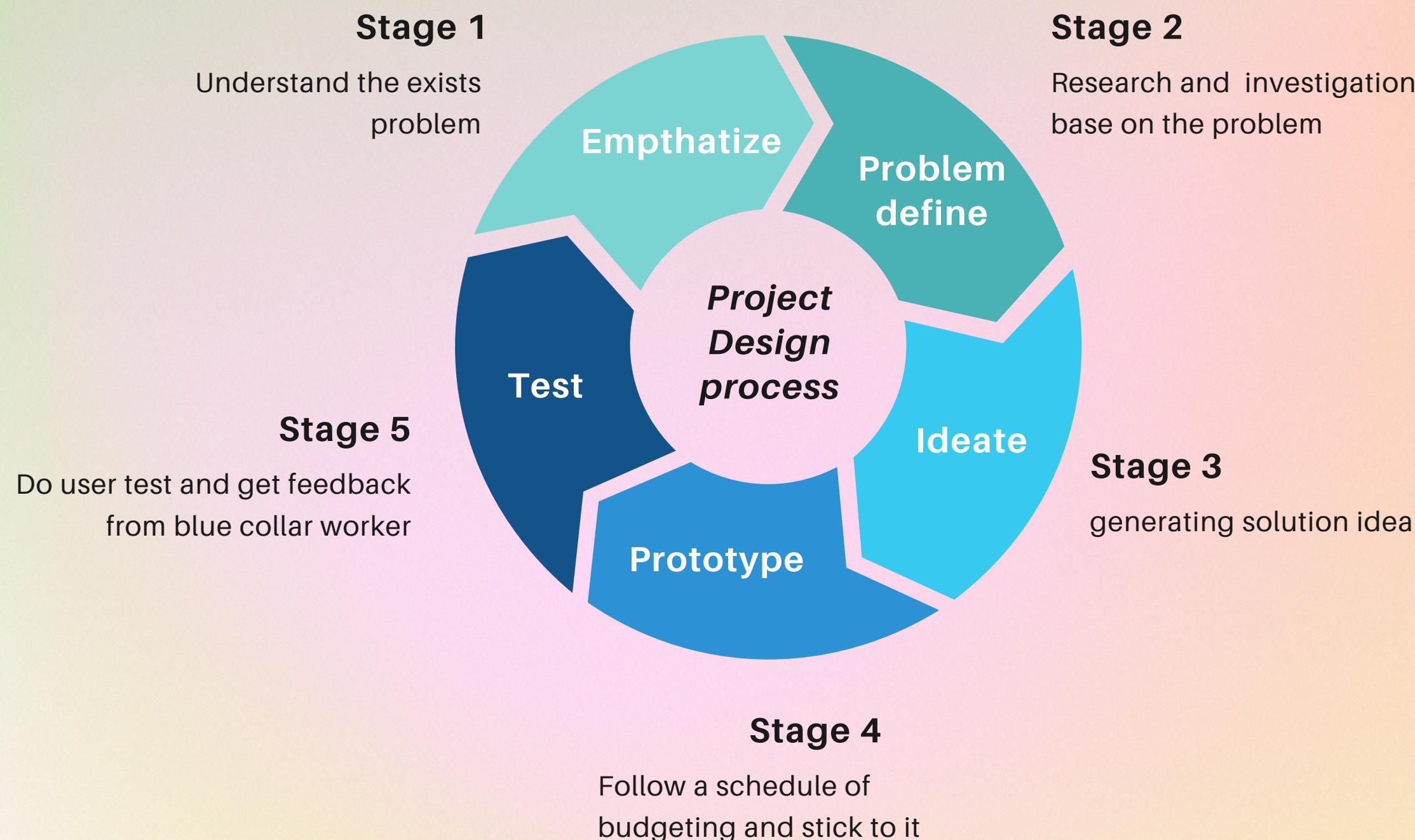


Record the nutrition of each meal

Analysing the nutritional structure

Managing diets and recommending healthy eating plans

# Future work Plan



What's we need to do until next step

**Week 6**  
Research and questionnaire preparation

**Week 8**  
Complete first Prototype

**Week 7**  
gerenrating idea from results and start project design

**Week 9**  
Presentation material and Feedback analysis