# Design Thinking



# Empathize

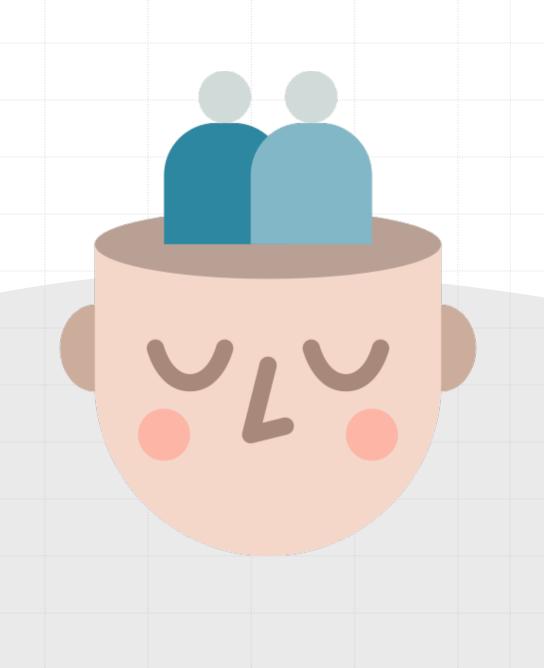
Name: K.Methee

Profile: Data Analyst

Life Style: Likes to exercise regularly by

running and has to work late hours

sometimes due to adhoc work



## Define

**User Description:** feels that group participation and learning outcome from online learning is inferior when compared with (offline) in-class environment. Moreover, opportunities to ask questions and class discussions are limited.

**User's Need:** User needs a way to increase learning outcome from online learning and gain more class discussion as well as opportunity to ask questions

**User's Insight:** Because despite the challenges of online learning, it does offer a convenient way to learn, minimize traveling hazzel and lecture recordings for revision after class

## Ideate

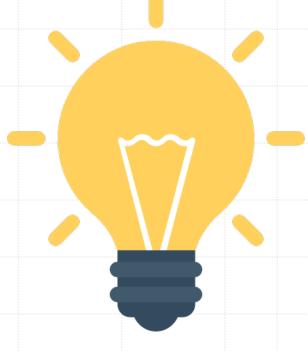
Q&A learning blog Half of topics suggested by students

Teach/tutor for extra points Exam tested only on unmastered topics

Metaverse classroom

Teach/tutor others for no exam

E- learning outcome checklist



## Prototype



Mastery gauge

#### Mastery score gained via:



#### Q&A blog:

- Ask a question
- Post an answer
- Authorized answer



Teach/tutor



In-class answer



Topic checklist completion

### Test

#### Like:

- Like the fact that if the mastery score theshold has been passed there is no exam
- Exam quized on topics that lack mastery
- Opportunity to learn and focus on topics at need the most

#### Dislike:

- Still cannot meet friends face-to-face



#### **Question:**

- How can the instructor track and monitor if there are many students?
- How are the mastery score awarded and guaued?

#### Idea:

- Add AI instructors to help answers questions and assess student learning needs
- Integrate metaverse and virtual reality to simulate real classroom environment

