

**BME 590: FUNDAMENTALS OF  
ENGINEERING DESIGN**

# DESIGN EXPERIMENT

*Salinas - Fall 2017*

Your mission: **Design a useful and meaningful wallet for your partner**  
**Start by gaining empathy**

## **1 Interview**

8 min (2 sessions x 4 minutes each)

Notes from your first interview

Switch roles and repeat interview

## **2 Dig Deeper**

6 min (2 sessions x 3 minutes each)

Notes from your second interview

Switch roles and repeat interview

# Reframe the problem

## 3 Capture Findings

3 minutes

### Goals and Wishes:

What is your partner trying to achieve?

\*use verbs

**Insights:** New learnings about your partner's feelings or motivations. What is something you see about your partner's experience that maybe s/he doesn't see?\*

\*make inferences from what you heard

## 4 Take a Stand with a point-of-view madlib

3 min



partner's name/description

needs a way to

because (or 'but'...or 'interestingly'...)

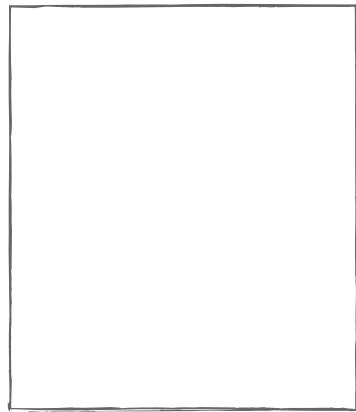
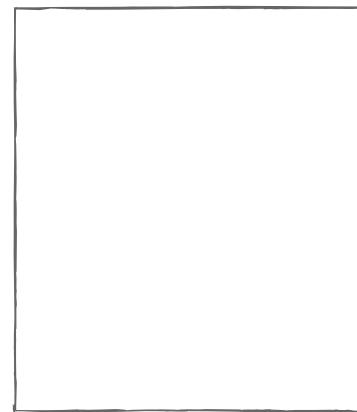
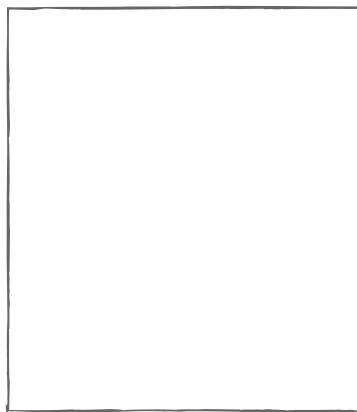
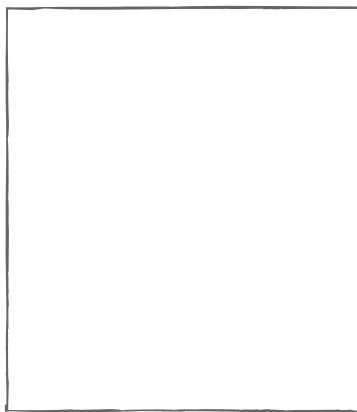
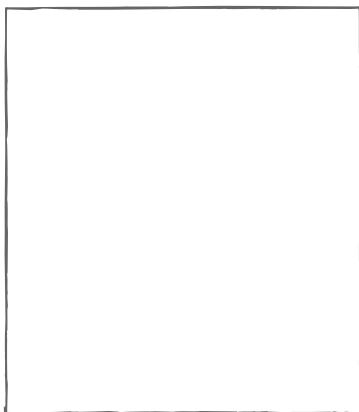
insight

**Ideate:** create multiple alternatives to test

**5 Sketch at least 5 super creative ways to meet user's needs**

5 minutes

**Problem Statement:** \_\_\_\_\_



**6 Share solutions and capture feedback** 10 min (2 sessions x 5 minutes each)

Notes

Switch roles and repeat sharing

**Iterate:** hash out best idea based on feedback

## **7 Reflect and generate new solution**

3 minutes

Sketch your big idea, full of necessary details

# Build and Test

## 8 Build your solution

7 minutes

Make something with which your partner can interact

[Not here]



## 9 Share solution and get feedback

8 min (2 sessions x 4 minutes each)

⊕ What worked...

⊖ Needs improvement...

? Questions...

! Ideas...

Switch roles and repeat sharing