

# DESIGN METHODS PROJECT

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Phase III

Team 1



## Our Team

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**Ramanjeet**

Undergrad Major:  
Mechanical  
Engineering



**Gabby**

Undergrad Major:  
Accounting



**Steven**

Undergrad Major:  
Finance



**Rithu**

Undergrad Major:  
Computer Engineering



## Meet Sammy

- Age: 20-30 years
- Work: MS program graduate student
- Character: loyal student
- Personality Traits: Organized, Practical, Motivated, Hardworking, Energetic, and Goal-Oriented

# Sammy's View on Technical Masters

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## Difficult

This program is incredibly challenging coming from my background

## Time Consuming

I spend more time on assignments and concepts than ever before in undergrad



## Not Qualified

Despite being accepted I don't feel I belong here

## Help Needed

More resources need to be provided to smoothen the transition into a technical master's program

# Research Question

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## STUDENTS MOVING FROM NON-TECH UNDERGRAD MAJOR TO TECHNICAL GRADUATE PROGRAM

Our research deals with understanding how this transition affects the student's lifestyle and whether it has any impact.

What motivates students to take up a tech-based graduate program, and how are they coping with it?



01

## Building Empathy

Personal interviews, Photo journaling and Journey mapping

02

## Defining the challenge

Aggregating collected data from participants to arrive at a challenge statement

03

## Ideate, Prototype and Test

Some up with a solution and prototype it. Test the output.

# Challenge Statement

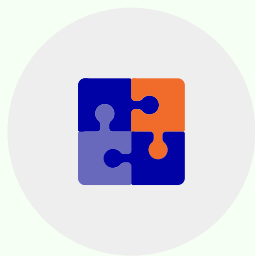
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How might we smoothen the transition between a non-technical undergrad program to a technical master's program and improve their coding skills to enhance their understanding?

# Pain Points

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## Stress

“How will I complete all these assignments on time?”



## Lack of Confidence

“Lara seems to know a lot about c++, I could never get so good at that”



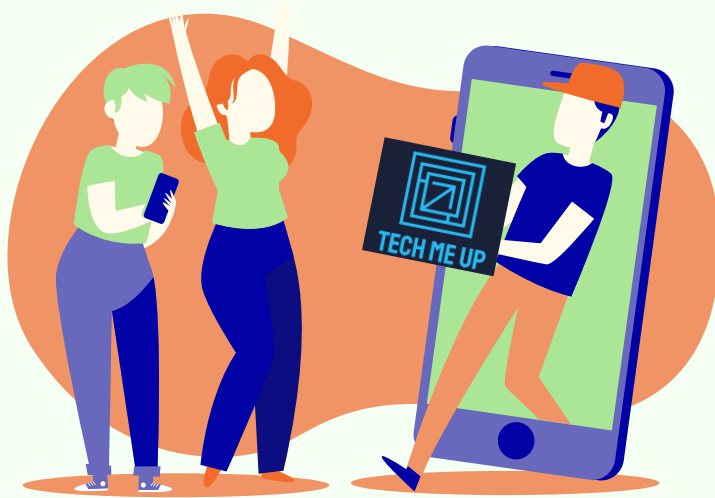
## No Experience

“How do I navigate through this IDE??”



# SOLUTION IDEAS

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Our team developed an application prototype available on both website and mobile platforms to stimulate our target participants and boost their confidence in two significant ways:

- Enlarge technological insights
- Improve coding skills.

# MAJOR FEATURES OVERVIEW



## Crash Courses and Certification

- Varied difficulty levels
- Varied programming languages
- Different tracks of certificates



## Gamification & Reward

- Earn points by daily coding challenge
- Redeem every kind of coupons
- Winning streak system
- Monthly user progress review



## News & Networking

- Daily technical news from journals
- Tech wikipedia and daily tech word
- Networking with other MS people through message system

## Tech-Stack of Curriculum

- Details about the tech-stack used in each course
- Instructions on technical settings such as hardwares, IDEs, and package installations



# Our Prototype

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We bring tech skills to your fingertips.

No need to pull all-nighters now!

# Meet your Tech Companion

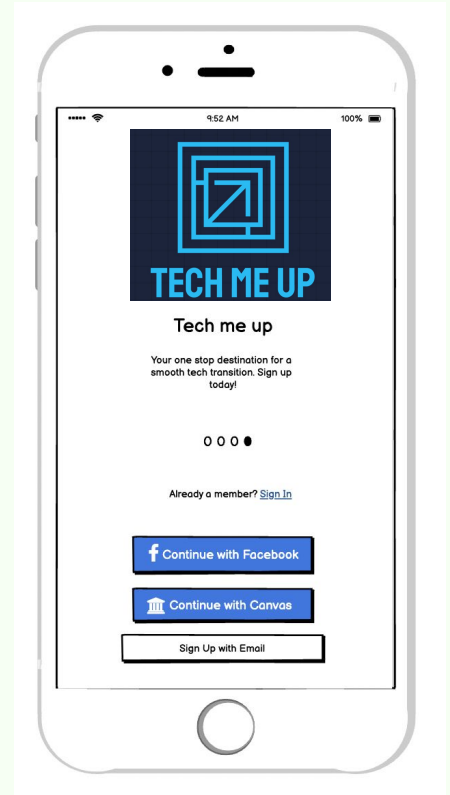
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Provide options to help students prepare for their courses beforehand, making them more confident ultimately

Users can log in with Facebook, google and even UT EID

The app allows students to link with Canvas to sync their progress with the UT systems

The reward program motivates students to perform better



# Coding and Gaming 2.0

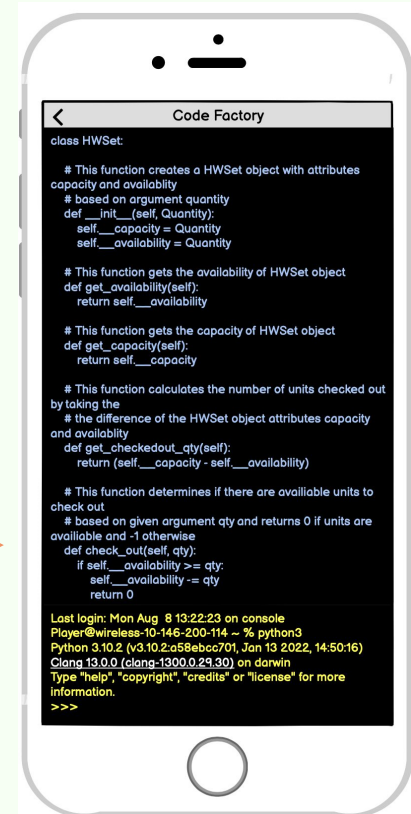


Users will play a game by completing coding challenges to progress

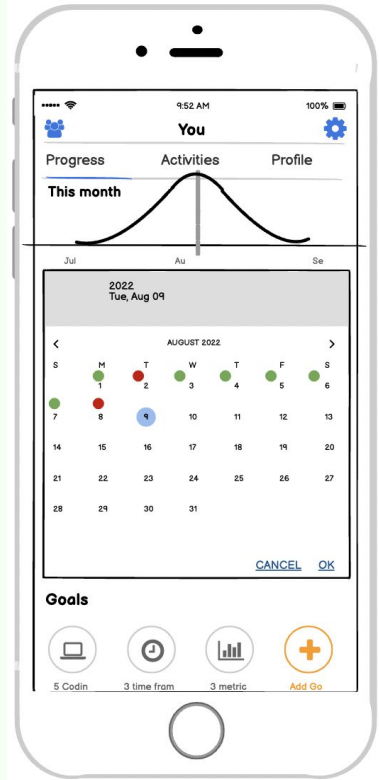
In Game Screen For Coding!! Here, users will have access to the full capabilities of a traditional IDE



Less Stress



# Check your Progress and Rewards



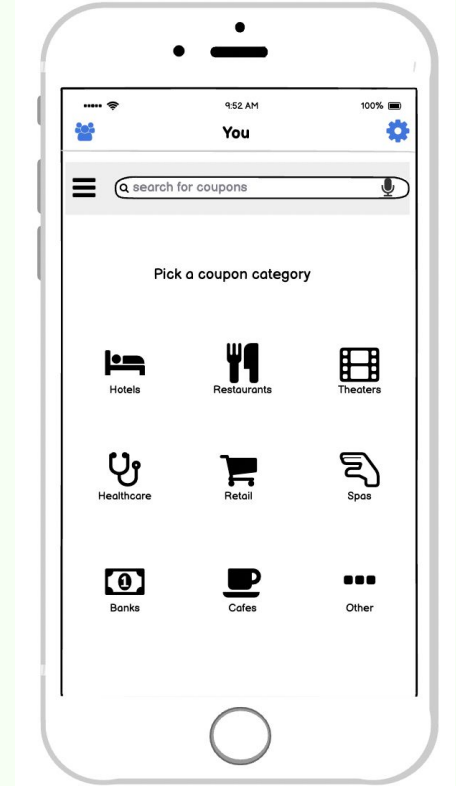
Now you can check your progress and plan your coding journey. Maintain a streak!



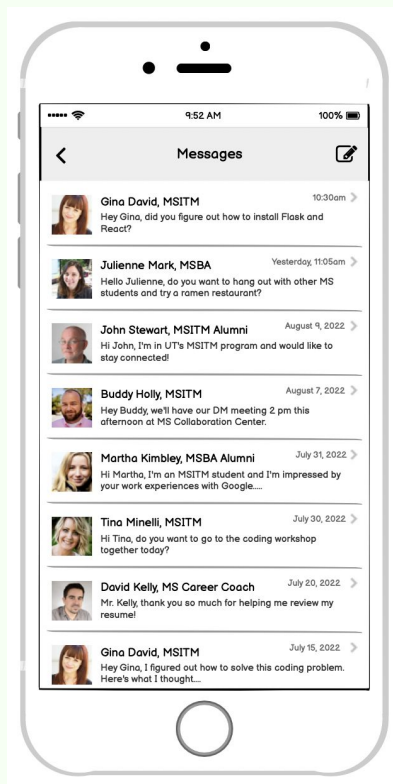
**More  
Confidence**

**REWARDS, REWARDS!!**

You will earn credits and coupons.

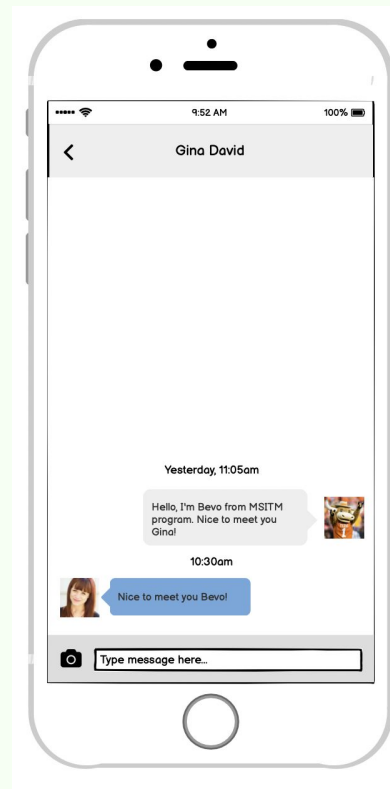


# Chat Room

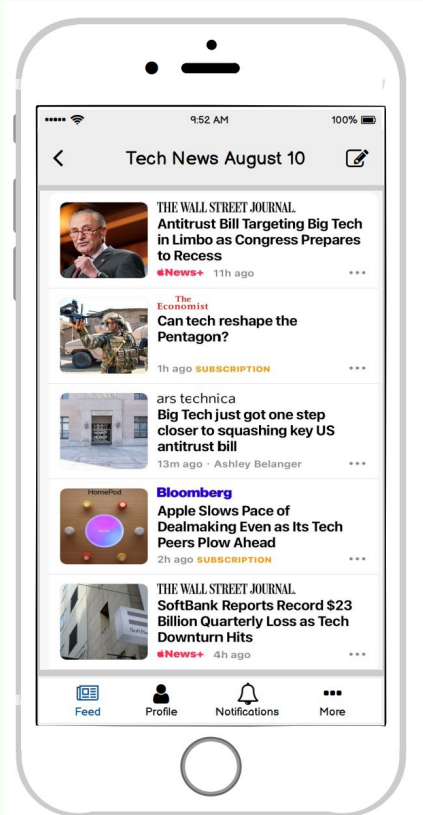


## Chat with Alumni

Feeling left behind? Talk to  
your seniors

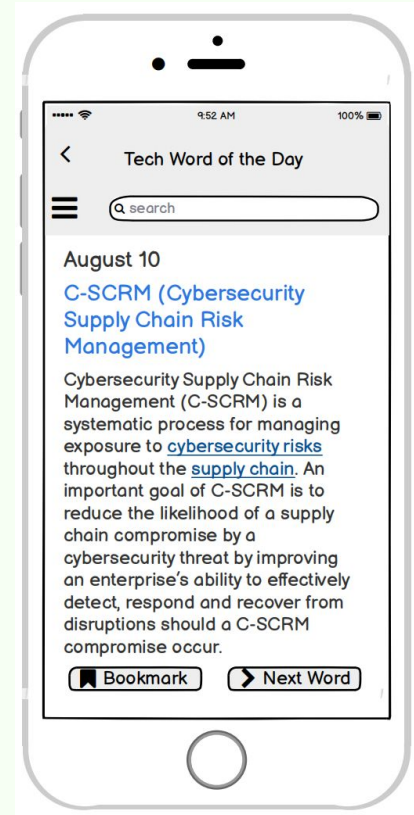


# Newsletter and Tech Word of the Day



Stay up-to-date with  
the ever evolving  
industry.

You are one step closer to  
being tech-savvy with  
'tech word of the day'  
feature





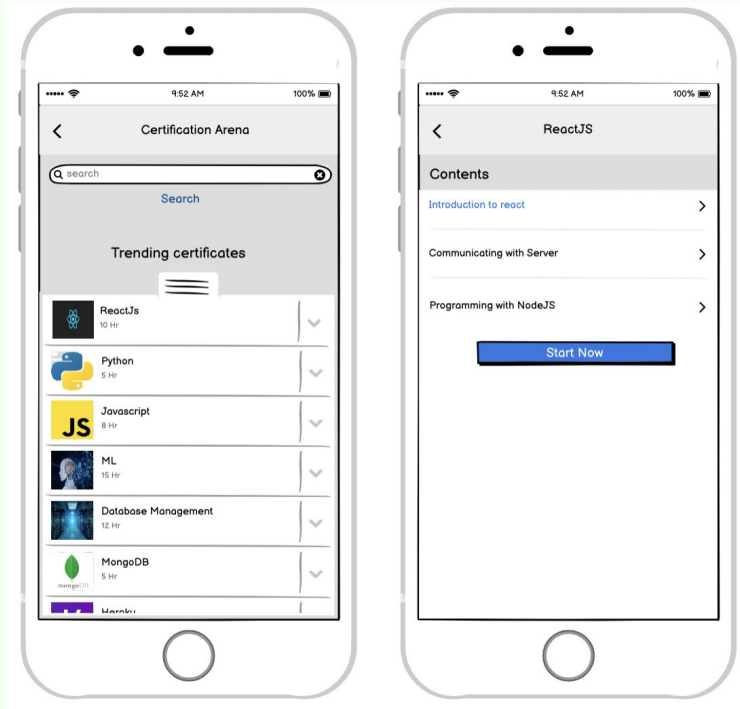
# Enter the Certification Arena

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You can earn certificates for any technical skill you want. You could also look for trending certifications acquired by your peers.

We partner with Coursera, Udemy, Skillshare and many other online teaching communities to provide more comprehensive options.

Rewards programs are embedded to help students stay motivated and save on expenses.



# Tech Stack

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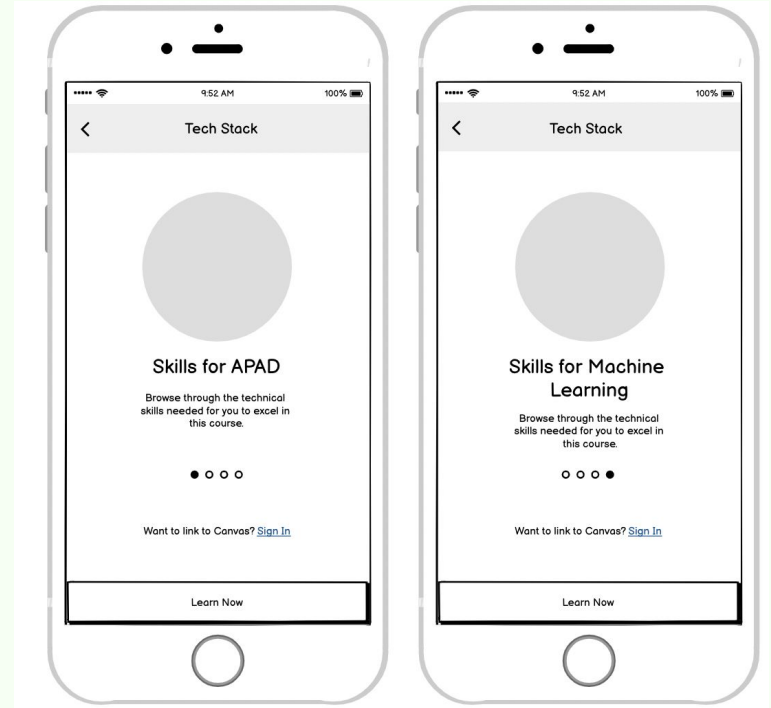
You can learn the technical skills as per your courses.

This will help students to gain insight and knowledge of the tech going to be used in that particular course

So STACK up your skills!



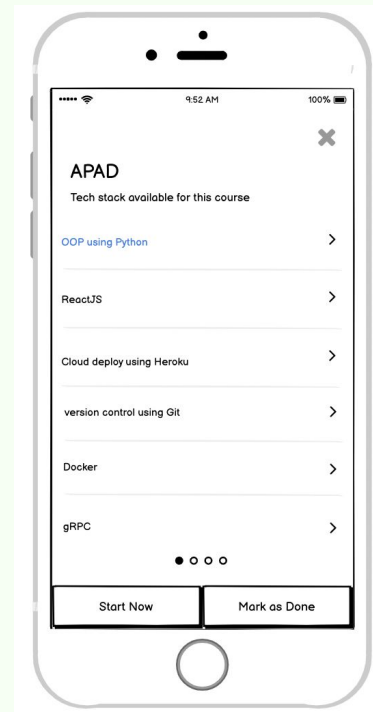
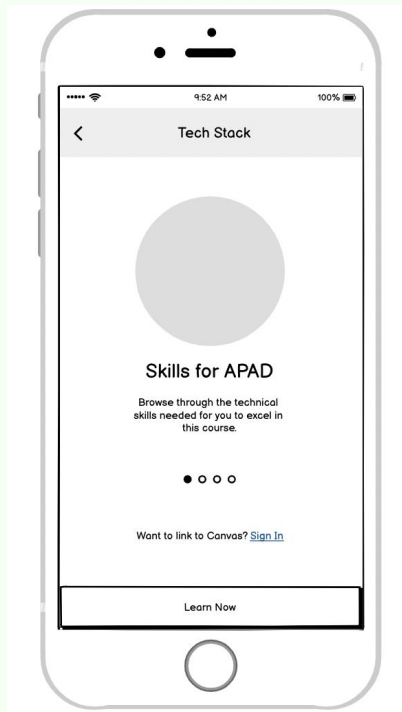
**More  
experience**



# Explore APAD

Stuck with REACT?

Tech Stack got  
you covered



# Testing Plan

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## Pitch our idea

We will tell graduate students about our app

## Walkthrough our prototype

Showing our app and it's features

## Analyse emotions

Understand if their emotions turned positive

## Make changes

Implement changes in our app

## Receive feedbacks

We will consolidate the responses

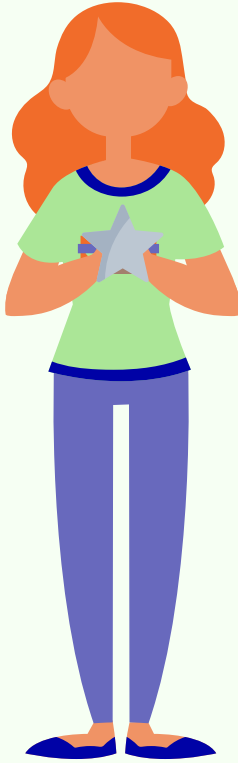
## Send out surveys

We will send out surveys with our prototype



# Testing Reviews

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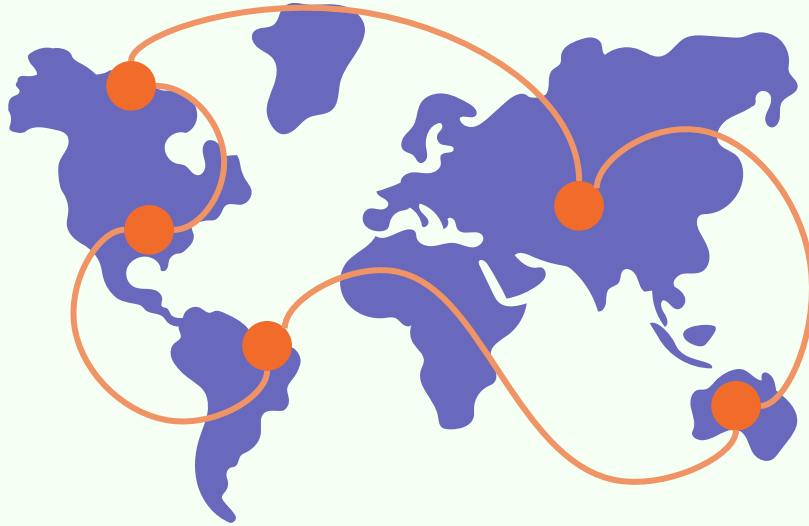
"I like that I can check out  
the technology used in  
different courses  
beforehand"

"Maintaining streaks will  
motivate me for sure. I have a  
great streak record with  
Snapchat and Duolingo"



# Predicted Growth

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## New Users

Currently this app is focused on UT students, but this can be modified further and eventually be used by other colleges around the world.

# End Goal

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- To address persona confidence: Our app's primary result is a confident user capable of completing even the most formidable coding challenges.
- To address persona stress: The secondary result is less stress throughout the program resulting in a more enjoyable experience for users.
- To address persona's lack of relaxation time: The final result is a fun time within our app, having a great user experience playing games or learning to code. We want an app that can mix and match learning styles.

# Ramification

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Notify students if there is a streak break, remind them of their last best score, and gift them coupons for starting a new streak.

Design group incentive system like weekly study camp on different topics for users to stimulate their performances in small groups.

Expose them to simple coding problems and reward them more extensive so they don't tend to lose their confidence and deviate from their learning curve.

Option for earning more rewards by tutoring other students who are facing difficulty with similar problems.

Request feedback from students who have left the app and have not been back in a while to determine what turned them away from our app and what additional features we can implement to restore their motivation to use our app.



# Reflections

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- **Concerns**

- We're concerned about the effectiveness of our prototype in reaching our goal of easing the transition to a more technical master's program
- We're concerned that the users may not feel motivated or encouraged to utilize this prototype fully.

- **Learnings**

- We have learned that non-tech undergrads and tech grads are really not that different in some aspects and that they could also benefit from our prototype.
- We have learned that the key to any design is asking yourself, "What do my peers need, and how can I help?"

