# Team K.A.R. HW 9

# 

# Project Brief

**Goals:** Enhance teacher-student interactions and relationships in order to improve both the teacher’s and the student’s experience.

**Audience:** Middle school students (6th-8th grade) and their teachers who realize the importance of establishing improved relationships between teachers and students. The attributes of the students include a desire to have fun and express themselves, and the ability and the general worldview of 12-14 year old Americans. The attributes of the teachers include the aspiration to improve the lives of their students and see the impact that they make, the need to balance their own conception of what is best for the child with the child’s conception of their own world, and the ability of a trained professional.

**Principles:**

There are 3 key constraints that we must keep in mind for a successful production of this product:

First and foremost, our design must be youth-friendly in terms of aesthetics and vocabulary, and easily-accessible, intuitive & usable so that the students can comfortably interact with the app in a way that is congruous with how they usually interact with their environment and technology.

Second, our design must contain different UIs for different target groups so that it can *efficiently* address different problems and goals for the different target groups. In each case the design of the UI needs to be based both on the the goals of each group, as well as the attributes that were listed in the audience section above.

Third, our design must respect the privacy and confidentiality rights of our target users. We must be particularly mindful that these rights and restrictions are more extensive in the case of children and thus we must ensure that our app does not infringe upon these rights.

**Scenario:**

A 7th grade female student recently lost her grandmother who passed away last week. She has difficulty focusing in class and even at home, where she is constantly reminded of the absence of her grandmother. These challenging personal circumstances make it difficult for the student to interact with her peers and teachers. However because of a new app that her and her teacher have been using, they have created a strong personal relationship and the teacher is able to both identify the reason for her change in behavior, as well as implement a solution that is relevant to the student’s life. Because of this, the student is better able to deal with her personal circumstances and her academic performance is improved. The teacher’s sense of satisfaction is also greater as they have a deeper connection with the student and can see the difference that their involvement has made.

## Product Concept

**Product Name**: Spectra

**Concept Description**:

For many teachers, they enter into the profession because of wanting to develop relationships with students. However, their job involves many more aspects: creating curriculum, grading tests, delivering content, aligning to state standards, and working with other teachers. To facilitate the student-teacher relationship process, we created Feels to streamline the communication process. At a glance, teachers can see the spectrum of emotions and moods their students have in a given day. From this initial information, teachers can initiate conversations to further develop their relationships with students.

**Populations**: Middle school students and teachers

## Prototypes

We chose to use Sketch in order to facilitate the user testing process. For this phase of user testing, we put them into google slides as a simple clickable prototype. In the future, we would like to gather data virtually so it would be helpful to have a digital design that can be made clickable.

Video: <https://drive.google.com/file/d/1ePUQBCm8AycpJhDvc1NmgPAXkEdF9h9E/view?usp=sharing>

## Usability Study Preparation

**UI 1:**

Scenario 1: You are a Middle-School student who would like to communicate with your teacher.

Tasks:

1. Let your teacher know how you are feeling today.
2. Let your teacher know that you want to speak to them.

Scenario 2: You are a Middle-School teacher who would like to communicate with your student.

Tasks:

1. Communicate with Jacky Smith’s parents.
2. Check how Jacky Smith was feeling last Friday.

**UI 2:**

Scenario 3: You are a Middle-School student who would like to communicate with your teacher.

Tasks:

1. Let your teacher know how you are feeling today.
2. Tell your teacher something that you want them to know.

Scenario 4: You are a Middle-School teacher who would like to communicate with your student.

Tasks:.

1. Check how Jacky Smith is feeling today.
2. Communicate with Jacky Smith.

## 

## Usability Testing Summary

On Tuesday March 27th, we interviewed three individuals at the Harvard Graduate School of Education. Our participants were current students at Harvard Graduate School of Education and former teachers. Jhenna was an educator in a museum. Bobak was a high school computer science teacher. Alex was a 4th grade teacher. Each of them interacted with four prototypes (i.e. both stakeholders for both UIs). For testing the scenarios that were for different stakeholders, we asked the interviewees to go through the tasks listed above. Afterwards, we asked them a couple questions about what they preferred, disliked, and why.

The following is a list of problems and insights gathered from the tests.

(T) = Teacher

(S) = Student

\* Evidence included in ( ) following the insight

**Problems/Insights for UI 1**

1. (S) “In 3 words” could be limiting for the students in terms of attempting to express their emotions *(“What happens if I need more than three words to fully describe my feelings to you?”)*
   1. Make it an open response to allow students to express freely and it creates a learning opportunity for students to learn to express their feelings
2. (S) Student should be able to see their own history to allow them to observe how they have changed over time *(When the interviewee wanted to see how he felt yesterday, he realized he couldn’t “go back” in time on the platform and expressed frustration)*
3. (S) Students should be able control which teachers access their information in case students prefer certain teachers, and also because the students’ privacy should be protected *(“What happens if I don’t want my math teacher how I am feeling today because I don’t feel close enough to share with him/her?”)*
4. (S) When students update the mood too often, the system breaks *(evidence from our own testing with multiple interviewees & “What if a student is changing his mood constantly to get attention from the teacher?”)*
   1. Limit the mood update to twice a day to prevent system failure and over-usage
5. (T) Can’t remember what colors mean what emotions in the history screen *(“What did these colors mean again?”)*
6. (S/T) Color blind users would have a hard time selecting the right emotions and interpreting them *(“I actually don’t know what these colors are because I’m colorblind, so if there was a way for people like me to use the app, it would be great!”)*
   1. Create redundant cues so it’s easier for color blind people to use
7. (S/T) There needs to be an updatable system that marks “resolved” issues *(“How can I monitor resolved issues so that I can keep track of them?”)*

**Problems/Insights for UI 2**

1. (T) Notes and messages need to be very separate in different tabs *(“I think notes are different from messages - messages feel much more … intimate and personal”)*
2. (T) There should be warning pop-ups before sending messages to prevent any mistakes *(“I would hate to have sent that message just now to the teacher! Remind me to check!”)*
3. (T) There should be a designated tab to find a list of student names who have alerted the teacher and wants further attention *(“It’s a hassle to click through every student individually to monitor their messages - a page to pull them all together would be helpful!”)*
4. (T) Tracking and observing the history/record of students in a quantitative way would be helpful *(The interviewees repeatedly sought to track the activities of different students but had a difficult time to track them)*
5. (S) “Update mood” is confusing - I want to change my existing mood but it’s creating a new mood instead *(“Wait, I didn’t want to create a new mood, I just wanted to update!”)*
6. (S/T) There needs to be an updatable system that marks “resolved” issues *(“How can I monitor resolved issues so that I can keep track of them?”)*

## Pitch Feedback

* Niche population might be helpful
* Focus on the student motivation piece - teachers know relationships are important, how can students know the same?
* Flow between problem and screens was too jarring. Would be helpful to have “how” slide
* Focus on encouraging the students to participate. Correlation between relationship and student outcomes. Younger kids that don’t question or know how to troll. Need to link the problem how we’re going to solve it before moving onto the UI.
* Younger audience that doesn’t know to troll and would be open to sharing feelings might be helpful

## Draft Work for HW 10:

UI Revisions:

Student:

* Single textbox with a 100 characters limit
* We decided to lose the slider with percentages and instead replace it with three emotions that fit under the broader emotion that the student has selected.

Teacher

* On teacher UI we added grey for students who have not updated their mood yet.

Proposed

* We added a class mood screen that displays the prevalence of different moods of the class. This is shown once the student has inputted his mood for the day and acts as a motivational tool.
* We added back buttons on all screens
* Redundant cues and create key so teachers know which colors mean what.
* We changed the home screen by removing the logo, changing the background and moving all buttons except new mood in a hamburger menu
* We added an option for students to choose which teachers they wanted to see their mood for the day.
* We added a sidebar in the teacher UI with all students that have requested meetings, also giving them the option of checking off students that they have met with.
* We removed the option of notes or teacher sending a message and replaced it with a log of the students past comments that the teacher could curated with options to favorite or delete past comments.
* We revamped the teacher UI student profile, by allowing one mood update per day, changing the location of the emoji, emotion and comments.
* We added a color key to both teacher UI screens.
* We added a home button on the teacher UI.

Student Prioritized Features

* Opt out for certain teachers - students should have ownership over their data, teachers see the same thing if you didn’t fill out or opt out of sharing