

HCI 510 – Design Sketches

In this deliverable, you are going to document your ideation and sketching activities for your new interface based on the previous deliverable. The outcome of this deliverable will be low-fidelity sketches **or simple wireframes of your proposed interface design**, along with use scenarios for at least three of the tasks you identified previously.

Ideation Reflections

Did you hold an ideation session to brainstorm for ideas as to how to solve the design issue you are working on? How did it go? If not, why not?

The work done in the last deliverable gave us the insight that there were three main issues that users had with the app. These were as follows 1. The home screen was confusing 2. The UI was bad 3. The results section was too hard to understand. In our ideation session we came up with some solutions for the 3 major problems with the app. The home screen will be simplified and beautified so that logging in is as easy and fast as possible. We also want to test adding the feature that allows users to choose which test they want to use at the beginning of the user flow instead of at the end hidden in the settings. For the UI we are going to implement best practices for minimalist design. The results section present the biggest challenge but we feel it can be solved mostly with some UI changes readability was very poor for our test users and it is paramount to the success of this app that the results section is easy to understand.

Usage Scenarios

You will need to provide a usage scenario description for **at least three** of the five tasks you identified previously. **You should demonstrate how a user will accomplish the tasks with your design.** Refer to your HTI from the previous deliverable. It is important that each task be expressed in the vocabulary of the interface (e.g. “press the ORDER button”, “swipe with two finger to delete”, “say ‘FIND’ to initiate the search”).

Instead of using a narrative format (similar to the example we covered in class), you can present your usage scenarios in a bulleted list that outlines the tasks and their subtasks. Here is an example:

Task: Completing mental health questionnaire and viewing the results

This task refers to how users will use the mental health screening app. This is a usage scenario for the normal usage of mental screening app from start to finish. We have included the HTI from the original design with the new design to illustrate how our design will solve the usability problems identified in the last deliverable.

This is the previous User Flow based on the HTI:

Task 1. To Login(Original)

- Press the app icon to launch
- Select the text box
- Enter username in textfield

- Press save
- Press select

Task 1. To Login (New Design)

- Press the app icon to launch
- Choose Screening Test
 - PHQ-9 (for depression)
 - GAD-7(for anxiety)

Task 2. To Complete Questionnaire(Original)

- Read disclaimer
- Press continue
- Read question
- Select an answer option
- Repeat until seeing report pop-ups
 - Press restart the questionnaire
 - Press save to continue

Task 2. To Complete Questionnaire (New Design)

- Read disclaimer
- Press continue
- Read question
- Select an answer option
- Repeat until seeing report pop-ups
 - Press restart the questionnaire to do again
 - Press save to continue and view results

Task 3. To View Results (Original)

- View the screen that showing a spider graph and bar graph
 - To switch the graph to line chart, press the line chart button
 - To view detailed report, press the icon in navi bar
 - To export result as pdf or email, press share icon
 - Choose appropriate option in the pop-up
- View and Interpret Results
- To export result as pdf or email, press share icon
 - Choose appropriate option in the pop-up
 - Share via email
 - Export PDF
 - Go Back

Task 3. To View Results (New Design)

- Press Results icon on the Nav Bar
- Read Results Message that explains user depression, anxiety etc.
- For Further detailed report press more information button
 - This option shows the details behind the results including test scores and question responses.
- Share Results Option
- To export result as pdf or email, press share icon

- Choose appropriate option in the pop-up
 - Share via email
 - Export PDF
 - Go Back

Task: Viewing and accessing courses on the Blackboard homepage

This task refers to how students will view their courses after logging in to Blackboard and how they can access the Blackboard pages for their courses. This task is specific to the homepage. The following is a usage scenario description for how they can accomplish these tasks.

To view the courses you are taking

- Log-in to Blackboard with your ID.
- Your courses should be listed on the home page.
- Scroll down to view all of the courses you are currently taking.

To access a specific course page

- Click on the course name located on the upper left corner of the box for that course
- This box also enables you to view and quickly access the most recent announcements from that course, recently uploaded course materials, recently-added grades and the reminders you have for that specific course.

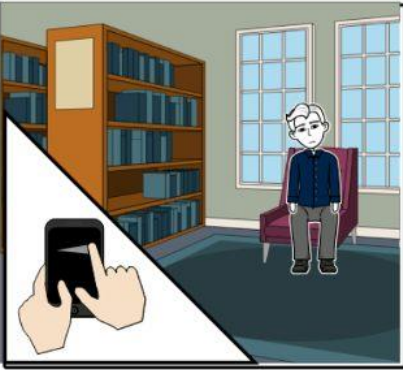
As you can see this description is very specific to the task identified. You should follow a similar strategy and come up with a usage scenario description for your three tasks.

Low-fidelity prototypes

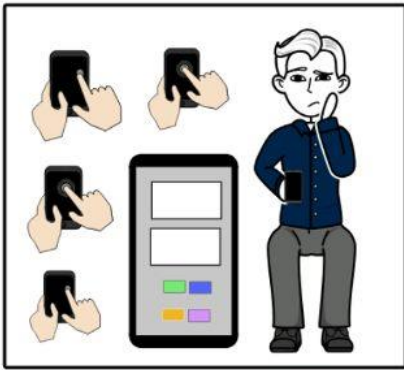
You should develop low-fidelity prototypes for each of the three usage scenario descriptions presented above. This is a throwaway prototype that involves a series of sketches (can be drawn on a computer or by hand) of screens, menus, and other interface elements. Avoid including all of the interface elements in this first prototype. Remember you are trying to convey your initial design ideas. *Hand-drawn sketches work best for this purpose.* Alternatively, you can develop storyboards that demonstrate, step by step, of how the user will interact with the system as they work through a task. For each storyboard, there should be an image of the screen and a short caption that explains what is happening, what we are seeing, and what is expected to happen next.



The user had returned home after a long and rather unpleasant day. He was not so much in a good mood.
 After charging his iPhone, the user unplugged the charger and picked up his iPhone.
 He swiped to the right to unlock the iPhone.



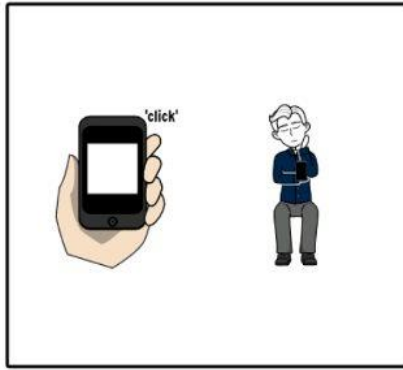
He walked over to a chair or couch and sat down as he browsed through the collection of apps.
 He saw a certain app for testing depression. He was feeling uneasy earlier with some rather unhappy thoughts. Was stressed? He was worried if this was an issue. He tapped on the app icon.



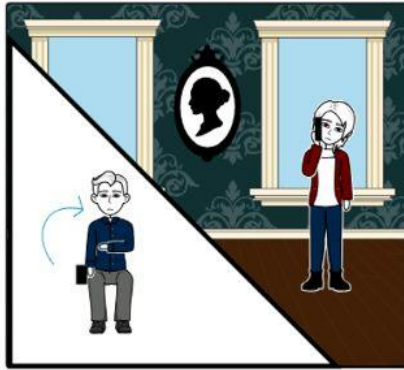
He selected the text-box to enter username in text-field. He Pressed save. He Pressed select. He was about to start a questionnaire, but first he saw and read the disclaimer. He glanced through the text and pressed continue. He Read the question on screen and selected an answer. He answered a few more questions until he saw a report pop-up. He had the option to "restart" the questionnaire or he can save it to continue. He pressed to continue.



He viewed the screen that showing a spider graph and bar graph. He spun the spider graph on the upper portion of the screen, before directing his eyes to the graph on the bottom half of the screen. He observed the bars. He then flicked his finger to "switch" the bar graph to a line chart. He had the option to view detailed report, and push the icon in navi bar. He had the option to export result as pdf or email, or push the share icon.



He viewed and interpreted results.
 He exits out of app pressing his thumb on a button on his iPhone.



As he sat on the couch with iPhone sitting near his hand to the right of him, the user reflection over the information he had observed.
 He calls his friend, to tell what a rough day he had....

Create your own at Storyboard That

We were limited to 6 space on the storyboard app we used.

AT&T

6:53 AM

75%

Existing User

mcgodes

New User

Select

Delete

Enter a username

New User

Save



Users



Test



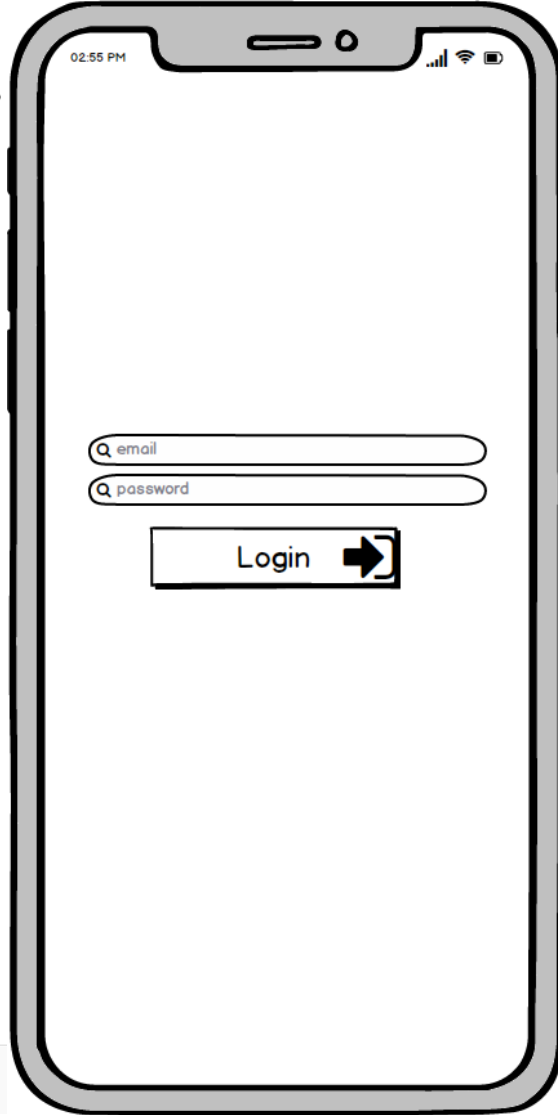
Charts

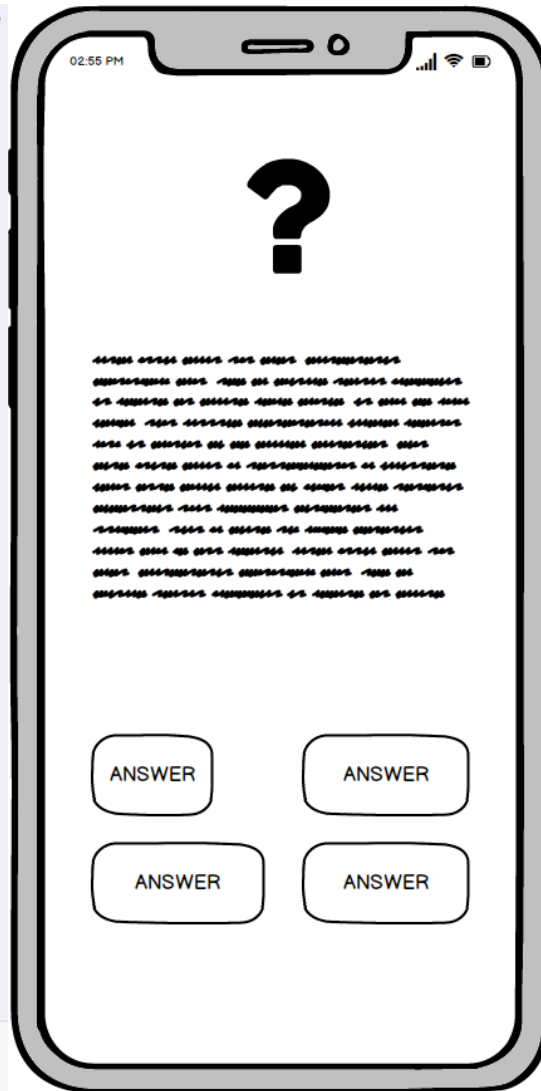
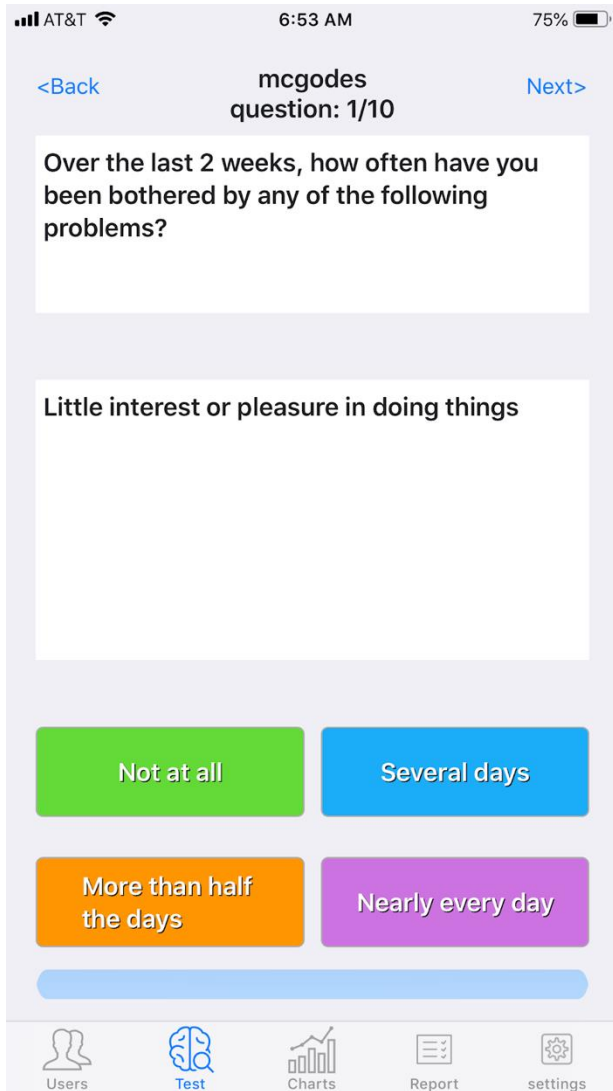


Report



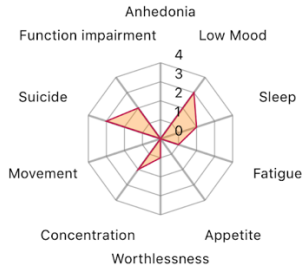
settings



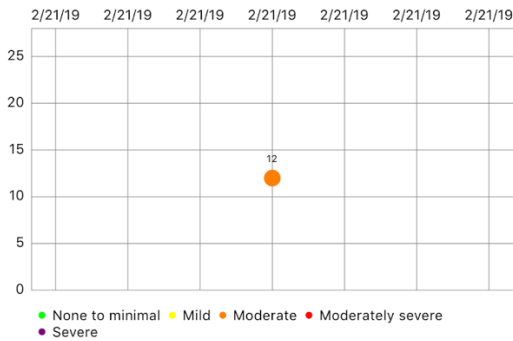


Your Score:12

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)



<<Prev. Next>>



<< >> max limit 15

Bar Chart Line Chart

Full Name: mcgodes Date: 2/21/19

Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feeling down, depressed, or hopeless?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Trouble falling or staying asleep, or sleeping too much?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Feeling tired or having little energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Poor appetite or overeating?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Trouble concentrating on things, such as reading the newspaper or watching television?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Thoughts that you would be better off dead, or of hurting yourself in some way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

	Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Your total score: 12 /27

Result: You probably have Other Depressive Disorder, with severity score of 12 as moderate depression. A full clinical assessment is recommended. (For newly detection of suicide or self-injury risk, you need to see a doctor as soon as possible)

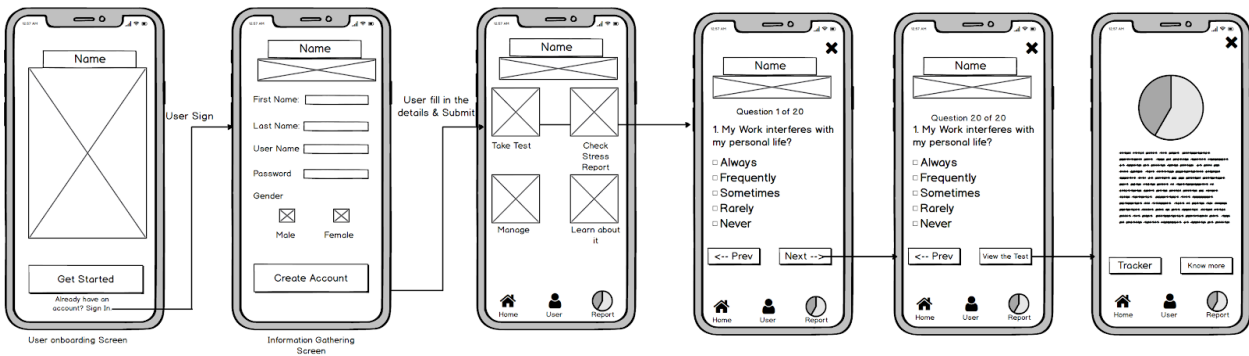
*PHQ-9 using slightly different diagnostic criteria from DSM-4 or DSM-5 which specified all symptoms except significant weight change (5%) and item 8 (any degree of suicide thought will be count) persist nearly every day in the past two weeks. (Kandy Paterson, 2014).

PHQ-9 score ≥ 10 had a sensitivity of 88% and a specificity of 88% for major depression. (Kroenke et al, 2001).

Suicide hotlines provide help to those in need. [Global Suicide Hotline Resources](#)

Acknowledgement: PHQ-9 was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.

Score	Depression severity	Comments
0-4	Minimal or none	Monitor; may not require treatment
5-9	Mild	Use clinical judgment (symptom duration, functional impairment) to determine necessity of treatment
10-14	Moderate	



Insights

Describe any insights you gained from the ideation process. Any eye-openers? Ta-da or uh-oh moments?

The process provided many insights. The problems that users faced tended to be similar. For instance the "Login Page" was very confusing and most users felt the same way about it. The UI of the app was also very poor, this is something that most users noticed. The ideation process is really effective at identifying the major usability problems as well as providing a framework for improving the problems.

User would probably feel more comfortable if the application was more personal or at least provide some privacy. If for whatever reason the app allows multiple users, there should be a log in for each user. The title of the app could be a little discrete when displayed as an icon on one's phone.

Although it shows charts at the end of a questionnaire, the app does not give a lot of real solutions for the problems involving the issue. There could at least be a link to help find a professional, helpful exercises to combat stress, or something to motivate the user.

The insights gained from the ideation process opened up the possibilities for different improvements upon the current application. A general concern we found was in a break of work flow, the current application has a disconnect between the test and actually displaying the users results. Adding to this confusion, the current tone of the application appears to be too technical. Users currently have to interpret results given by the app in the form of confusing charts and long descriptions. Scores are shown to the user that explain nothing making the user do more work than necessary. A sense of direction is required in order to increase the usability and personality of this application, instead the user is given information and forced to interpret. When working with a user base that is dealing with mental health, the last thing we want to do is make them feel alone. Giving them vague information and being forced to find a solution to the problems being presented don't help the user, instead it only confirms the issues that lead them to download the app in the first place possibly leading to further anxiety.

A possible solution to the cold nature of the application is a general rebranding of both the voice and the application itself. An icon on someone's phone that reads "A Simple Depression Test" could make a user self-conscious which is a common cause of anxiety.