# CS 591 Mobile Application Development

# Worksheet 1: Brainstorming Android Apps.

The purpose of this worksheet is to initiate some collaboration that will get you thinking creatively ab the functions and features of your mobile device. Please try to get to know the people you are collaborating with. They may become your team members for the final project.  Although we are working with Android, the concepts apply for any device.  List the various sensors and devices on typical Mobile Phones.  List 5 of your favorite Apps. Briefly describe what they do and what makes them so great.  With your team, generate 3 ideas for apps. Briefly describe what they would do if they existed. Yo	Date:
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	Mish varietane agreement 2 ideas for once. Briefly describe what they would do if they evicted. You
	will share these with the class.

# Could you do it better?:

etc.) Identify	the pros and cons of each, and what features are great, but could be improved, what
	nissing. For the latter two items, describe with some detail how you would implement is and what technology might be used to implement these missing features. Be ready to e class.
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#### **App Design Challenge(s):**

For each of the scenarios below, design an app that might be helpful. Consider all of the resources and tools available to you (or that you might implement or get from a 3<sup>rd</sup> party) on a typical Android cellular phone. Eg., voice recorder, call blocker, databases, crowdsourcing, caller ID, SMS, Camera, gyroscope, GPS, etc. Storyboard your idea on a separate sheet of paper, that is describe the application and sketch what the app might look like.

You will work in teams on this, be prepared to present your designs to the class.

### 1. Emergency Response App.

Every year at BU incoming freshman are overwhelmed by the city and occasionally get themselves into dangerous situations. What are some of your ideas for an App that would enable someone to know where it is safe to go and, if in trouble, quickly and easily notify others.

-	consider the different sensors of all / marcia flantaset.					
-	Also consider the possibility of crowdsourcing realtime and archived data					

### 2. Contractor for You:

"Contractor For You" is an App connecting Professional Contractors with individuals interested in having work done on their home.

If someone were to pay you to design this App, what are some things you would need to consider? What would some of the requirements be in terms of device hardware/software/back end		
storage/etc?		

### Scenario 1: "Lobstahmen's Friend"

Your friend is a lobsterman. He complains about how challenging it is, and tells

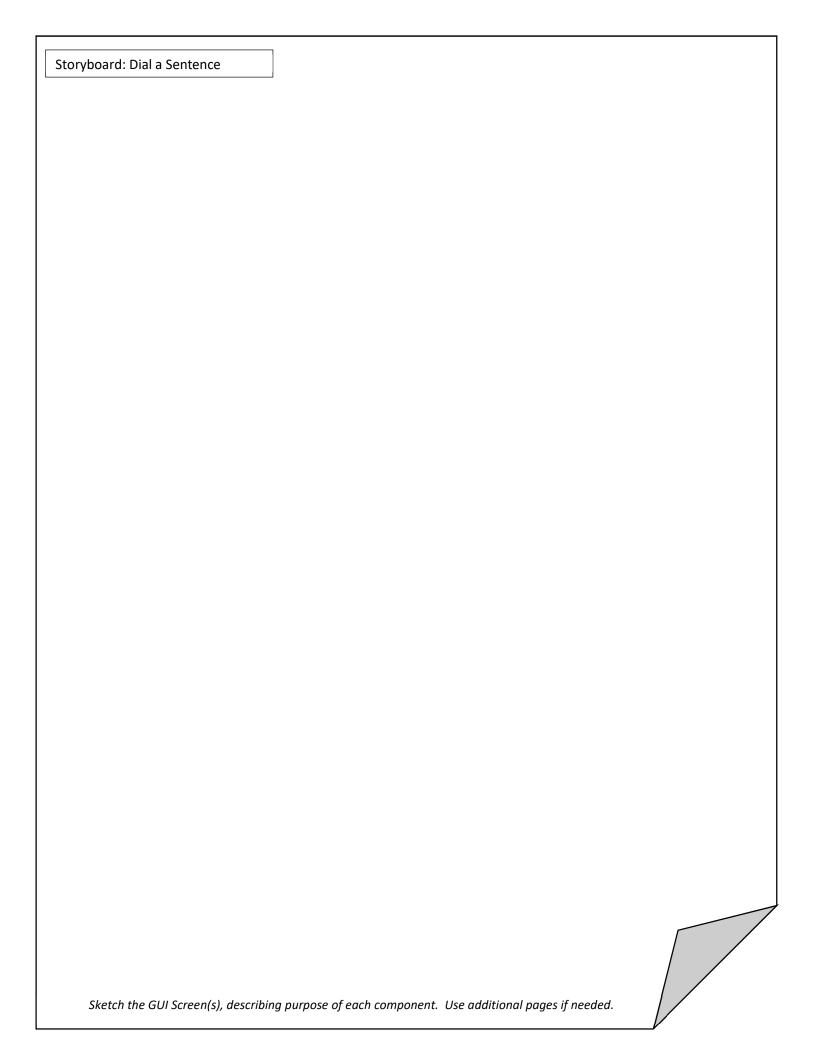
you he needs an App to make his job easier. What are some questions you ask him (requirements gathering)? Now that you understand some of his issues, explain how you might implement an app to address his needs.

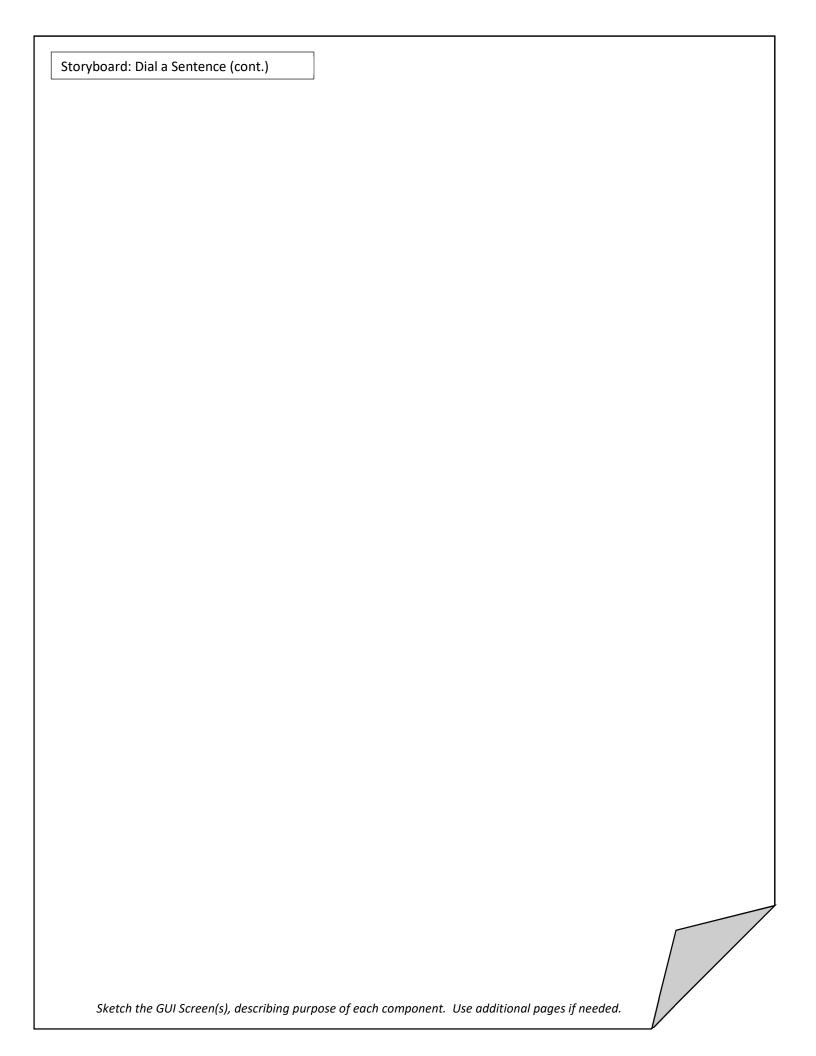
Scenario 2: "Dial a Sentence" - Learning a foreign language can be difficult. One approach I have taken for teaching a language, is to use flashcards with images. For example, if I was teaching a beginner child Spanish, and wanted them to learn various food names. I would "throw" flashcards with pictures of food onto a table. When the child says the correct answer they would move on. If they respond incorrectly, the card moves to the "retry" pile for retrying later. The effort is timed, time ends when all of the flashcards have been correctly identified. The child with the shortest time wins.

This approach is very effective, but it would be nice if there were an App that could help me with this, so I wouldn't have to constantly throw flashcards and identify if the child responded properly.

Bonus: Dial a Sentence. Once children learn items in the flashcard, it would be very helpful to teach them short sentences. Eg, Not just the word "bread", but something like, "I want to eat bread", "I love bread", "I made bread", etc.

App Description (detailed)						





Sto	ryboard:	
	Sketch the GUI Screen(s), describing purpose of each component. Use additional pages if needed.	