

Programming Assignment – 3

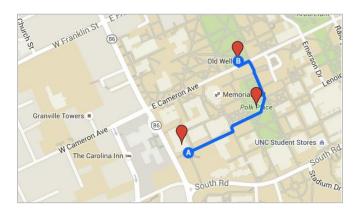
Topic: Location-aware music

Due: March 30, 2017

1. Overview – Google Location Service and Media Player

The goal of this assignment is to play music based on the user's location context. We have identified 3 key locations in our campus: Brooks building entrance, Polk Place, and Old Well. Your app needs to detect these three locations and play a specific song at that location.

Note: Unless you have LTE, we will need EDUROAM WiFi configured on your Android device for this assignment. You might need Internet access during the campus walk.



2. Point Distribution

Tasks		Pts	Comments	Grade (TA only)
1.	A running app with a GUI showing at least the location coordinates and address (using Geocoder)	20		
2.	A fixed image of the map (like the above one) where your app will show a red circle when any of the 3 locations is entered. There should not be any circle when we leave a location and we are in-between two locations.	20		
3.	Automatically play specific songs at the Brooks Entrance, Polk Place, and the Old Well.	20		
4.	Automatically stop playing songs in-between two locations (i.e. far from all three)	20		
5.	Quitting and restarting the App: stops/starts the song as appropriate and does not crash the app.	20		
	Total:	100		

Student Name, PID, and course number:

3. Submission

- Late submission is not allowed.
- You must be present in person during the tour to get your assignment graded.
- On the assignment submission day, we will form groups. A group leader (possibly a graduate student) will lead a group of 3-4 students.
- Make sure that your phone is fully charged, and the GPS and the Internet are working. You should test the GPS and Internet connectivity ahead of time (not on the day of assignment submission) to avoid such issues.
- As always, you will have to upload your zipped project folder (as YOURPID_LASTNAME.zip) into Sakai by 11:55 pm EST on March 30, 2017.
- We encourage you to bring your camera and take pictures of the event. If the day is nice and your assignment works, it may be a lifetime memory (optional).