

Proposal

[Submit Assignment](#)

Due Sunday by 11:59pm **Points** 10 **Submitting** a text entry box or a file upload

Requirements

You must submit a proposal that explains, in a few paragraphs, what your app will be, its minimum level of functionality, and how it will meet the following requirements. Make sure you clearly state the points you would get from each feature of your project.

You can choose what aspects of Android programming you'll include in your project. In total, **you must include at least 8 points** from the following list. For example, you could implement 3 hard features, and 2 medium features, or 2 hard features and 4 medium features. Of course, you're more than welcome to implement features that aren't included on this list. Indeed, if something you'd like to do isn't on this list, but you think its difficulty is commensurate with that of other items listed, just explain your idea in your proposal, and those points will count towards the total. You must implement each feature non-trivially, i.e. just having a "Google Map" activity isn't enough, you must actually use the map activity for something useful.

Your project must also be **interesting**. You can use old assignments as the base but you must be adding something new to it. For example, you can use WOUstagram as a base for some sort of photo sharing app and add in Google Maps or add more activities, but you can't just make a photo uploader with additional menu items. If I think your proposal is too similar to the homeworks, I will let you know and allow you to change the proposal without penalties.

Medium (1 point each)

- Use of SharedPreferences.
- Use of ListView/RecyclerView with custom adapter.
- Use of a spinner.
- Use of menu items.
- Use of three or more Activities.
- Use of Async tasks.
- Use of Camera.
- Use of an Android service that requires user-granted [permissions](https://developer.android.com/guide/topics/permissions/requesting.html#permission-groups) (<https://developer.android.com/guide/topics/permissions/requesting.html#permission-groups>).

Hard (2 points each)

- Use of an HTTP API. Here are some great ones to check out: <https://github.com/toddmotto/public-apis> [_ \(https://github.com/toddmotto/public-apis\)](https://github.com/toddmotto/public-apis).
- Use of SQL database (Anko).
- Use of MongoDB
- Use of a hardware feature: GPS, microphone, orientation, etc.
- Use of a fragment.
- Use of animation and a Custom View or Surface View.
- Use of Google Maps or similar external API.
- Use of Firebase.

Super Cool and Hard

- Use of AWS/Google Cloud/Azure cloud functions (3 points)
- VR/AR (4 points)

Grading

The entire project will be **120 points**.

The proposal counts for **10 points**. I will give feedback on the proposals to ensure that everyone's apps meet the above requirements.

We will also have demos in class during dead week. The demos will be **10 points**. You will get all 10 points if you successfully demo something with minimal issues. This is a chance for you to test out your app and see if you need to make any additional changes.

The rest of the project grade will be split between style (10%) and adherence to your proposal (80%). If you end up omitting some functionality that you originally specified in your proposal, please make a note in your README.

Extra Credit will be given for projects that go above and beyond the expectations.