

ITMD 455/555 Final Project

General Requirements:

To design and develop an android application and deploy the same on a physical android device. All of the below mentioned requirements are to be satisfied by every project.

1. The application must be purposeful
2. The UI must be clear, pleasing to the eye and easy to use. Watch the device orientation. Portrait and Landscape orientation may disrupt the UI
3. Must include input validations where ever applicable
4. Must include error handling where ever applicable
5. Must use asynchronous processing where ever applicable. Memory and CPU usage must be kept at a minimum
6. Must use at least five different UI elements such as Text view, Button, etc.
7. Must use at least two different presentation elements such as tabbed view, scroll view, etc.
8. Must use at least three different activities. The functionality of the application must be divided among these activities. A single activity must not be used to handle all the work
9. Must use local storage (files/SQLite)
10. Must implement recommended practices for resource usage and services
11. All projects must be demonstrated on a device along with a detailed presentation on the Project Day

Graduate Requirements (Pick any 2):

Graduate students must choose any two of the below mentioned features and implement them in your project to get full credit.

1. GCM / Notifications
2. Maps / Location based services
3. Sensors (Fingerprint, NFC, Accelerometer, etc.)
4. Services for background execution

Extra Credit (Each carries 10 points, Maximum of 3):

1. JUnit testing for Android
2. Social media integration (Facebook API, Twitter API, etc.)
3. Google Analytics for Android
4. Dynamic data consumption from web services
5. Each of the graduate requirements will be considered as extra credit for the under graduate students

Group Policy:

A maximum of three per group. Each student must carry his/her weight for the project. Divide the work equally and explain each one's part during the presentation.

Submissions:

1. Phase – I (March 31st 2016. Refer black board for submission format)

- a. Project idea document (Fill the template file. Separate forms for ITMD455 and ITMD555.)
- b. Design document
 - i. UML / Use case diagram generated for your application (Check out <https://www.visual-paradigm.com/download>)
 - ii. Link to a prototype of your application (Must use online tools. Check out <https://proto.io>, <https://www.fluidui.com>, <https://moqups.com>, <https://www.draw.io>)

2. Phase – II (April 30th 2016. Refer black board for submission format)

- a. Project presentation
 - i. Abstract and summary
 - ii. Design and development
 - iii. Functionality and Screenshots
 - iv. Conclusion
- b. Zip of the Android Studio Project
- c. Readme file for additional instructions to setup/run the project.