In this project, we will focus on MVVM Design Pattern and processing tasks on background threads. The student needs to develop the application by using MVVM design pattern.

|  |  |
| --- | --- |
| **Functionality** | |
| **CRITERIA** | **MEETS SPECIFICATIONS** |
| Program compiles and runs on a phone | Program must function in Android Studio emulator and on a phone with no errors. |
| UI/UX | The look and feel should be acceptable. |
| MVVM Design Pattern | The activity should communicate with ViewModel class properly. |
| Progress bar | You should display a progress bar that shows the download time. |
| Action Event | You should give the user option to download anytime he wants. *Hint: Button.* |
| Completion | You should display completion message when the task is completed to the user. |
| Multiple times | The user should have a new task every time he triggered an action. |
|  |  |
| **Code Review** | |
| **CRITERIA** | **MEETS SPECIFICATIONS** |
| MVVM | The activity should be dump layout and has not logic. All the logic should be written in the ViewModel class |
| Background tasks | Download task should be running in background thread. You can use AsyncTask Class. |
| UI | UI should be responsive. |
| Rotation | Values should be handled while rotation by using ViewModel |
| Layout | Layout should observe the changes from ViewModel class by using **LiveData/MutableLiveData** |

Project submission:  
<https://forms.gle/JbXmXFZpxtjBdbhH6>