

MOBILE APPLICATION DEVELOPMENT - COSC2543

DropBox Explorer Application (20%)

1. ASSIGNMENT LEARNING OBJECTIVES

This assignment aims to provide students with the opportunity to work individually to implement the basic user interface and operations for a DropBox Explorer Application.

Course Learning Outcomes	Assignment Learning Objective	AQF LOD
LO1	UI design	S3
LO6	Selection for clouds persistent storage	S2, A2
LO3	Quality assurance on different android versions and screen sizes	K1, S1, A1
LO4	Project planning	S3, A3
LO4	Integration with cloud API	S1, A1
LO6	Technology, tools and libraries choice	S2, A1

2. ASSIGNMENT DESCRIPTION

You are to design and create a similar DropBox Explorer mobile app. The focus of this assignment is on mobile UI and UX. You have freedom to use your imagination to construct best UX and UI for your mobile product. Below is the product brief

3. MINIMUM FUNCTIONAL REQUIREMENTS

Login:

- Your application must allow user to login and logout DropBox using DropBox API for Android

File browsing

- Once logged in, your application should allow users to browse their folders and files in DropBox folder
- You should provide users at the minimum requirement a grid layouts for file browsing

Files modification

- Download files to phone
- Delete files
- Rename files
- Move files from one location to another location
- Delete folders
- Rename folders
- Move files from one location to another location

File uploading

- User can upload a file from either their SD Card or Phone Memory of DropBox

4. ADVANCED FUNCTIONALITY (BONUS MARKS)

Browsing Layout & Thumbnails

- Your application should provide user more a layout for file browsing (eg... grid, detail or list) and thumbnails for pictures

2-step verification

- Once the user is logged into your DropBox, a code will be sent either to your phone by SMS or email which is registered for that DropBox to verify account access.
- Edit files directly
- DropBox API: Your application must integrate with the DropBox API, in order to offer persistence of files in the cloud. DropBox API contains the Sync API (helps mobile app to store and sync files with Dropbox), Datastore API (helps keep your app's structured data in sync) and Core API (for server-based apps).
- User Interface must support all of the functionalities
- Your implementation must make efficient use of common values (such as Strings, Dimensions or Colors) by (re)using values from the appropriate XML resource file. i.e. do not hardcode such values into your layout files or your application.
- Your Target Android Version should be 5.0 (API Level 21) in order to test with real devices provided by the course.

5. SUBMISSION INSTRUCTIONS

- Your project should be implemented using Android Studio and your project exported as a compressed .zip archive before submitting it to Blackboard. Do not use any other compression formats - se of other formats (e.g. tar.gz, RAR, etc.) may lead to delays in marking and/or a deduction of assignment marks.
- **Assignment rubric** is provided to help students to know how to complete requirements fully and to **achieve full marks** (refer to assignment rubric in assignment section)

6. IMPORTANT REGULATIONS

- You are free to refer to textbooks and notes, and discuss the design issues (and associated general solutions) with your fellow members on Blackboard; however, the assignment should be your own individual work.
- Where you do make use of other references, please cite them in your work. Note that you will only be assessed on your own work so the use of third party designs is discouraged.
- Any usage of code/algorithms/3rd library should be written down in a readme.txt

7. RESOURCES:

- [1] Core API: <https://www.dropbox.com/developers/core>
- [2] Datastore API: <https://www.dropbox.com/developers/datastore>
- [3] Using the Sync API on Android:
<https://www.dropbox.com/developers/sync/start/android>
- [4] UI Overview: <http://developer.android.com/design/get-started/ui-overview.html>
- [5] How to create a Thumbnail image in Android:
<http://androidbridge.blogspot.com/2011/05/how-to-create-thumbnail-image-in.html>