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OPSC 7312

Assignment 2

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Minimum specs

ram: 200mb

cores: 4 core

storage: 20mb

5’ display

android studio 2.2.3

android os: lollipop +

age: 9+

# Introduction

My father is the owner of a Multiservice type of shop called Lock Stock and Barrel. Over the years he has made many changes to the processes of running the shop. One process that hasn’t changed for twenty years is how customers are given a receipt when they hand in items like shoes and bags for repairs.

At present carbon receipt books are printed and customers are given a receipt.

# Reason for this application

There are problems of having a book system:

Over the years I have worked at the shop and have realised that having a book system is old and outdated and is ineffective when customers have lost their ticket. Once repairs have been collected the receipt is stamped “collected”. This has helped with finding uncollected items.

The main problem of not having a database is so many people loose their tickets and the shop spends valuable time paging through the books looking for the customers names. Many don’t know when they brought the repairs in and some don’t know what name they used.

Having a book system has worked in the past but needs to be changed and updated to a paperless system.

This will help with a lot of problems the shop has, namely:

A database will be created

All names and cell numbers will be saved

Finding a repair will be as easy as searching in names or a cell number or a date the customer dropped off the repair.

By creating a database the shop will be able to use it as a marketing tool. Being able to sms all customers to market promotions could be one of the many options that the database will create.

# Specifications

“Your app must include the following technologies:

* Connection to an online database (Azure/ MySQL or FireBase) for storage and/ or retrieval

of records. JSON or GSON — consumption or feed;

* Material design;
* Your app must be responsive and scalable to different devices.

You also need to include any two of the following technologies:

* 3D Graphics with OpenGL ES;
* Web services;
* Multimedia APIs — camera, video, face detection, audio and/ or ringtones;
* Developing Android Services and threads;
* Advanced Input, Speech recognition and Text-to-Speech Services;

1. **General**

Your Android application must also satisfy the following specifications:

* 1. Include an options menu (or a start screen) that will allow the examiner to navigate

between your user screens and your help screens. Remember, you must submit one

Android application, with different parts;

* 1. Include an activity that specifies “How to Use” your application for each question;
  2. You are encouraged to integrate all your knowledge from all chapters as well as content

learned from websites. You must use menus, sub-menus and context menus for navigation

and functionality options or navigation drawers;

* 1. You will be awarded for the professionalism, user-friendliness and customer interest of

your application. We encourage you to publish your application onto the Google Playstore.

Ask your lecturer how you can do this;

* 1. You will be awarded if you use material design and styles;
  2. You may also include search/ retrieval functionality and reports;
  3. Methods and parameter passing must be used;
  4. A well-designed UI that will provide a positive user experience. Feel free to use your

creativity in the design;

* 1. Error check all input;
  2. Keep your application simple and restricted to one area. “

<https://portal.iie.ac.za/Student%20Manuals/OPSC7312_Open_Source_Coding_Intermediate/2017/Assignment%202.pdf>

# Screenshots





