|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Submission Coversheet (All Programmes) | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Student ID Number**  *(Do not include student name as anonymous marking is implemented)* | RAD18457818  DRO18457544  ANI18457381 | | | | | | |
| **Programme Title** | COMPUTING TECHNOLOGIES | | | | | | |
| **Module Title** | Mobile App Design and Development | | | | | | |
| **Module Code** *(listed on Moodle and in LTAFP)* |  | | | | | | |
| **Module Convenor** | Tendai Mhlanga | | | | | | |
| **Coursework Title** | Barter Trader-Assignment 1 | | | | | | |
| **Academic Declaration:**  *Students are reminded that the electronic copy of their essay may be checked, at any point during their degree, with Turnitin or other plagiarism detection software for plagiarised material.* | | | | | | | |
| **Word Count** |  | | | **Date Submitted** | | **26/11/2019** | |
|  |  | | |  | |  | |
| Please save your file as:  student id\_module code\_module\_title\_assessment name  for example: COR15416549\_QAB020N592S\_Managing Organisations)\_Essay 1 Teamwork | | | | | | | |

Contents

1. Introduction requirements-functional and non-functional
2. Application architecture
3. Architecture Principal-View-View Model-Model
4. Class diagram
5. Use case diagram
6. Code description- class description, class diagram
7. Testing
8. Mobile user experience UI/UX and implementation of accessibility features
9. References
10. Introduction requirements

Functional requirements

Barter trading application is required to perform the following procedures:

- A registration page to allow users to register including email address must be unique first name, surname and telephone number;

- Email address will be used as the login;

- Users are able to login to their accounts using their unique email address and password;

- In the user profile, a user can view account information (first name, surname, phone number, alias, email), their private inbox of messages-offers, the rating, my products (add item and delete an item), history of the barters;

- Deny access for users who are not registered to posting reviews, message users, buy any item, rating users, add item;

- Logged users must view the categories;

- Logged users must view only their own profile;

- Logged users must have option to post a new item to barter;

- Categories listed for logged and anonymous users are: Gadgets, Clothes, Tools, Bicycles;

- Logged and anonymous users are selecting one of the four categories than all gadgets are displayed in a scrollable list allowing for navigability of the list;

- Each category lists the same gadgets;

- The object of class Categories are dynamically read from a firebase database and then set on the activity;

- If logged user clicks on one of the items/gadgets than details of the item/gadgets are displayed;

- Logged user must have option to view reviews of the user who posted the item for barter and to message the user;

- Details of each item/gadget must include: description of the item, rating of the user who posted the item, option to list all the items that this user whose item the logged user is currently viewing;

- If user is interested in the item and want to offer something in the exchange of it than user is able to message the other user with his/her offer;

- If the users agree with the barter than status of the items is changed to agreed;

- Once the item status is changed to agreed it is no longer listed in the application;