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**NATIONAL UNIVERSITY OF SINGAPORE**

**CS2102 Database System**

**AY2018/2019 Semester 2**

**Group Report**

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1. Introduction

This project aims to create a website for users to share their items through a bidding system. The website runs on a RESTFUL api framework and its database is postregsql. The website is accessible at <https://cs2102postreg.herokuapp.com/main>.

1. Contribution of each member

|  |  |
| --- | --- |
| **Member** | **Responsibility** |
| Lee Ming Liang | * Design of login feature and user account creation using Passport.js, bcrypt, cookie-session * Designing of bidding system * Displaying bidding summary using google charts |
| Perry Wang Zhi Ming | * Overall UX design * Product page design * Chat system |
| Feng Bowen | * Search system * Transaction handling * Reviews system |
| Wong Qin Jiang | * New product listing * Image storage * User recommendation |

1. Application key functionalities

Ming Liang

1. ER model

Qin jiang

1. Relation schema

Bowen

1. Non-trivial constraints

Perry

1. Interesting queries

Perry

1. Software/framework

|  |  |
| --- | --- |
| Software/framework | Usage |
| Node.js |  |
| Express.js | Restful API, backend |
| Embedding javascript (ejs) | Frontend technology |
| Bootstrap | Styling |
| Jquery | Frontend |
| Postregsql | Database |
| Passport.js | User authentication |
| Cookie-session | User persistent login |
| Bcrypt | Hashing user password |
| Heroku | Cloud platform to host our website |
| Google cloud storage | Image hosting |

1. Sample screenshot

Ming Liang

1. Difficulties and key learning

Ming Liang

**Documentation:** (Comments on project progress)

1) ER diagram:

Completed

2) Entity

3) Creating complex trigger:

- Prevent multiple comments

- View history

4) Creating complex query:

- Most popular main page

- Recommender system

- Bidding summary (done)