**Project plan**

**Project Aim**

The project aim is to build a fully functional website that can be used to purchase and sell products at auction across a number of repositories, providing a solution to the issue of overselling an item when it is not available.

**Requirements**

* Add and remove items from repository.
* Item can be available in many repositories and can be sold individually or as a set, once it is sold it is removed from all repositories and sets.
* Once an item is removed from set, find replacement if available.
* Each Item has their own unique ID.

**Non-Functional requirements**

* Card details are encrypted.
* Give user option to sign up/checkout as guest.
* User details are securely stored.
* Website is easy to navigate and responsive.
* Information stored in the database is correct and efficiently retrieved when needed.
* Search feature for items and sets.

**Risks(Group)**

|  |  |  |  |
| --- | --- | --- | --- |
| Risk | Mitigation | Contingency | Effect on project |
| Hardware problems | Take care with electronics and ensure everything is up to date. | Keep all work backed up and available online/ via another computer.  Save work often.  Work on computers in the Lab. | Effect on project can be high if work is not saved/backed up online. |
| Miscommunication | Regular meetings and communication both face-to-face and through group chat.  Tasks and goals are clearly set and explained when necessary.  Important choices are made as a group and not individually. | Review the situation, then call another meeting to go over what went wrong and how to prevent it from happening again. | Effect can differ depending on the miscommunication. |
| Not meeting task deadlines | Set small and achievable tasks with an appropriate amount of time to complete.  Ensure all relevant information is available and a plan for each task is made.  Keep in constant communication with team members and ask for help when needed. | Allocate task to a team member that feels much more confident completing the task.  Revaluate the tasks and set aside less priority tasks to focus on tasks that are behind schedule. | Very high |
| Requirements implemented incorrectly | Meetings with client are fully documented, making sure to ask questions.  Appropriate progress is made and reviewed by client to ensure project is heading in the right direction. | Reassess the client's needs and make any necessary changes in response to feedback. | Very High |

**Programming language**

Certain: Python, JavaScript

Possible: Django, HTML

Please add/remove.

**Roles**

|  |  |
| --- | --- |
| Team leader | Sets tasks and reviews progress of current tasks. Updates team charters. |
| Database | Ensures database is setup correctly, items and relevant information is being stored and can be removed when needed. |
| Front-end | GUI of website and ensures all necessary features are implemented. |
| back-end | Ensures the functions work as intended, connecting the link between the front-end functions and database. |
| business logic | Maintains communication with client and ensures that completed tasks meet requirements. Runs frequent tests to ensure website functions as expected. |

**Deadlines**

April 25th

**Deliverables**

* Report – 8000 words total (10% variable)
* Program for online store along with necessary files and database.