**Project Proposal: development of database-based system with Django**

**Group Members:**

**Huang Jiahui**

**Joji James Anaghan**

**Su Qiulin**

**Wu Lingyun**

**Zhang Jiaxuan**

1. **Topic**:

Implementation of an online marketplace for buying and selling new and secondhand goods among SUTD.

1. **Description**:

Create a web application with a database backend using Django that implements features described below. The server can run both on local machine and online.

1. **Features to be included (equivalent to the original topic):**
   1. Registration: same as the book store. (new features to be added if applicable, profile picture etc.)
   2. Ordering: After registration, a user can order item that are available on the platform
   3. Selling: After registration, a user can post his/her item onto the platform, with specified name, price category and description. (categories are arranged in parent-child hierarchy: we will have some big categories on the top level and some small categories under each of them)
   4. Arrival of more copies: Sellers are able to modify the quantity of the item that they are selling (School Concert ticket, etc.)
   5. User record: upon user demand, following info will be printed:
      1. His/her account information
      2. His/her full history of orders
      3. His/her full history of feedbacks
      4. List of all the feedbacks he/she ranked with respect to usefulness
   6. Feedback recordings: Users can rate or leave a short comment on a seller’ public profile
   7. Comment ratings: users can access a seller’s public profile and rate a comment according to this seller
   8. Goods browsing: Users can browse through items by selecting a specific category. A user can also specify that the results are to be sorted by price or average rating of the seller. We my also implement a keyword searching tool to make the search result more concrete
   9. Useful feedbacks: Comments are displayed on a seller’s profile in the order of ratings, highest on the top and lowest at the bottom.
   10. Goods recommendation: We will implement Machine Learning Algorithms to build a recommender system.
   11. Statistics: Every month we will provide the information of:
       1. list of m most populsr sellers (in terms of items sold in this month)
       2. the list of m most popular categories