

## Semester Project Documentation

Semester Project Title:

### Student Details

	Student Name	Student Reg #	Student Degree
Student-1	Hassan Ahmed	2022568	AI
Student-2	Taqi Abbas	2022444	CE
Student-3	Ashir Arfan	2022124	CE

### Main Features

#### 1: Admin:

- ➔ Approving Members.
- ➔ Approving Item requests
- ➔ Restocking Inventory

#### 2:Members:

- ➔ Get Membership.
- ➔ Get items from Inventory.
- ➔ Put-in requests for items that are out of stock.

### Types of Users

1: Admin

2: Members

### Requirements Breakdown

*(Write requirements of each feature by numbering. For example: Requirements of feature # 1. It will be mentioned as 1.1, 1.2. Similarly for feature # 2 it will be 2.1, 2.2, 2.3 ... etc.)*

1:

1. Approving Members
  - 1.1 Incoming requests from new members.
  - 1.2 Checking data with already existing members.
  - 1.3 Approving or declining membership.
2. Approving Item requests
  - 2.1 Checking Incoming Requests from users.

- 2.2 Checking if admin has enough stock or not.
- 2.3 Approving or declining requests based on their demands.
- 3. Restocking Inventory.
  - 3.1 Checking for items that are running low.
  - 3.2 Restocking Inventory.
- 4. Get Membership.
  - 4.1 Choose a unique username and password for an account.
  - 4.2 Put in request to administer for approval of your membership.
  - 4.3 Request might get accepted or rejected.
- 5. Get Items from Inventory
  - 5.1 Check inventory
  - 5.2 Check availability.
  - 5.3 Get items.
- 6. Item Requests
  - 6.1 Check for items.
  - 6.2 Check availability.
  - 6.3 Request If items are less than required items.

### **Features to Coddng Matrix**

*(In the following table you will mention the following items for each feature, mention the items in each column for each feature of your application)*

Sr no.	Feature Name	OOP Type Used	Functions Created	Variables / Obj Created
1.	Approving Members	1.Operator Overloading. 2. Inheritance 3.	Check_new_member_req() Check_all_members()	Members[50] Memberreq[10] Num_members User reqs
2.	Restocking Inventory	1. Inheritance 2. Abstraction 3. Pure Virtual	Check_all_items() Restock_inventory()	Item* items[5]
3.	Get MemberShip	1. Inheritance 2. Encapsulation	New_member_req()	Member members[50]

4.	Item Request	1. Abstraction 2. Inheritance	Get_items() Check_all_itmes()	Item* items[5] Requests item_reqs[10]