

**COM1028 Software Engineering**  
**Revised Requirements Part 2**  
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## **1. Introduction**

This document presents a revised list of non-functional and functional requirements for my 'Online Market' project. (1 = Mandatory, 0 = Optional)

## **2. Revised Non-Functional Requirements**

### **3.1.1 Operational Requirements**

- The system shall use SQL Lite to store data into a database (1)
- The system should work cross platform due to java being compatible with different platforms (1)
- Database shall be backed up periodically on an external device (0)

### **3.1.2 Performance Requirements (1)**

- The system shall perform tasks in a reasonably acceptable time. Data should be fetched from database relatively fast, this is pivotal to ensure smooth interactions with the user interface.
- A computer system with decent spec and memory to run the program. The faster the system the smoother the performance.

### **3.1.3 Security Requirements (0)**

- Anyone with an account registered will be able to use the system. To be authenticated, a secure login system should be in place that allows the system to work out which users are administrators, and which are normal users whom may buy and sell products.
- Users do not have access to administrator's control, the system shall ensure that the user see's what they are supposed to see
- Database used should be secure, free from SQL injection
- Users will not be able to delete/edit any information except from their profile
- User's passwords will be hashed when stored in the database to ensure security and trust of our users specified in [3]

### **3.1.4 Cultural, Political or Legal Requirements (0)**

- The system should follow 'The Data Protection Act 1998' [3] making sure that any personal data stored in the database should be kept safe and secure from unauthorized access.
- System should comply with 'The Electronic Commerce (EC Directive) Regulations 2002' [4] making sure we gain the customer's trust by informing users on the 'terms of conditions' and any other additional information or conditions the user needs to know.
- The system should also comply with the 'Distance Selling Act 2000' [4], meaning that the products registered by the users should have information that is clear to read. This should be regulated and verified by the administrators.
- It is important to log the administrator's actions to make sure they abide with 'The Computer Misuse Act (1990)' [5]. They shouldn't edit data, such as someone's balance, without permission.

### 3. Revised Functional Requirements

1.0	The Login System	
1.1	The system shall allow the user to input their login details and log in	1
1.2	The system shall be able to validate the user's input in the login form and display any errors	0
1.3	The system shall allow a user to register a new customer or new admin account	1
1.4	The system shall be able to validate the user's input in the register form and display any errors	1
1.5	The system shall make sure that the username registered is unique	1
1.6	The system shall make sure that the user's password is hashed before being stored	0
1.7	The system shall update the database when user registers a new account	1
1.8	The system shall check whether a user is banned upon logging in, If banned do not allow access.	0
2.0	User Access Level	
2.1	A customer shall be able to view a list of products for sale in a list	1
2.2	A customer shall be able to sort a list of products from lowest price to highest price	0
2.3	A customer shall be able to query for a product using a search bar	0
2.4	A customer shall be able to select which category of products they would like to see	0
2.5	A customer shall be able to sort a list of products from their customer average reviews	0
2.6	A customer shall be able to log out of the system back into the login form	1
2.7	A customer shall be able to see the list of products they have registered	1
2.8	A customer shall be able view, add, edit a registered product or remove their own product	1
2.9	A customer shall be able to view their account details	1
2.10	A customer user shall be able to top up their balance	0
2.11	A customer shall be able to view a list of products in their wish list	1
2.12	A customer shall be able to remove products from the wish list and add products to the wish list	1
2.13	A customer shall be able to display the list of out of stock products in the user's wish list	0
2.14	A customer shall be able to view a list of products in their basket	1
2.15	A customer shall be able to remove products from the basket and add products to the basket	1
2.16	A customer shall be able to change the quantity of a product in the user's basket	0
2.17	A customer with enough balance shall be able to purchase their basket	1
2.18	A customer shall be able to see their list of transactions	1
2.19	A customer shall be able to add a review for a product or remove a review for a product	0
3.0	Admin Access Level	
3.1	Admin shall be able to view a list of customers	1
3.2	Admin shall be able to ban or unban a customer	1
3.3	Admin shall be able to remove any products registered in the system	1
3.4	Admin shall be able to verify or un-verify a list of newly registered products	1
3.5	Admins actions shall be logged by the system	1

## 4. Justification of Requirements

From my previous attempt, I have significantly increased the requirements for my software. That way the functionality is more concrete and explicit, allowing me to understand the parts of the software's function properly. Adding new functionalities will come with a cost as more resources and time will be spent. I believe that if I define many functionalities, the final product may be missing features due to the fact of limited time. To organise my time and work efficiently I have adapted and forced an agile development scheme. Any issues that I will have during the implementation step will be reported in the final report.

I restricted the functional requirements into 3 main categories. Login system, user access level and lastly admin access level. I felt that the old list was quite unstructured and all over the place, it would have been odd to work with and test against. By creating a new organised functional requirement, I hope to be able to test the finalised product against the functional requirements and make sure everything works as intended. Again, I hope to have complete the software by the deadline. Any removed features or issues will be written into the final report.

The Agile development scheme I have adopted will enable me to prioritize set features following a weekly schedule enabling me to swiftly finish with the implementation in an organised manner. The scheme will also prevent me from deviating and creating pointless features that goes against the functional requirements. Some features have been discarded due to a large mass of features. I believed that with too many features the final product will not be completed therefore I removed the following features;

- F4.3 If a product in the user's Wishlist becomes restocked, the user should be emailed and notified by the system.
- F4.4 If a product in the user's Wishlist price changes then the user should be emailed and notified by the system.
- F6.2 The system should calculate a user's selling score from reviews and rating
- F6.3 Determine whether a user can be banned judging from their score
- F4.7 I will remove the feature that allows a user to leave a review of a seller but allow the user to leave a review of a product.

The email functionality has been removed.

For the Non-Functional Requirements I have made both the security, cultural, political, legal requirements optional as I believe it would require a lot more time and documentation. I have decided to leave these as optional and work on these requirements after the mandatory requirements have been fully implemented. Prioritising is important so that the project is completed at a satisfactory level in a given period, prioritising the correct requirements will ensure this. Nothing has changed in my Non-Functional Requirements. I am very happy with it, it follows the guidelines of the SRS well. The only thing I have removed is the following statement. "Users are required to register and sell products", this was removed as this was not a non-functional requirement.