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URS

For S3 Individual track

User Requirement Specification

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Revisions				
Verison	Description	Date	Author	
1	Added base URS structure and FR's and use cases	06.09.2022	Yordan Doykov	
1.1	Added some use case extentions	08.09.2022	Yordan Doykov	

Introduction

This document aims to provide insight into the technical aspects of the software developed for the individual track project of semester 3 - Carspace. The purpose of the software is to allow people to make agreements about selling/buying cars in an online environment.

This URS includes all functional and non-functional requirements that are going to be developed in the software. Use cases are included so it can be understood exactly which requirements they cover and how the software is going to be used, along with some sample images of the GUI.

User requirements

This document uses the MoSCoW user requirement classification system, in which each letter stands for the following:

M – Must have: will be implemented mandatorily

S – Should have: should be implemented after the must-have's

C – Could have: nice to have features/ideas that are not essential and are not a priority

W - Won't have: features that will not be implemented

Non-functional requirements

1. NFR-01(M): Application is maintainable and extendable

2. NFR-02(M): System is bug free

3. NFR-03(M): Software is secure

Functional requirements

Web application

- 1. FR-01(M): Users must be able to log in the application
- 2. FR-02(M): Authenticated users must be able to log out of the application
- 3. FR-03(M): Users must be able to create their own account.
- 4. FR-04(M): Authenticated users must be able to create auctions
- 5. FR-05(M): Authenticated users must be able to specify when the auction will end along with all other relevant information
- 6. FR-06(M): Users must be able to see all live auctions
- 7. FR-07(M): Users must be able to see all ended auctions
- 8. FR-08 (M): Users must be able to search for auctions using filters and keywords
- 9. FR-09(M): Users must be able to see all the details of an auction including all bids and comments
- 10. FR-10(M): Authenticated users must be able to edit the information of ONLY their own auctions
- 11. FR-11(M): Authenticated users must be able to delete ONLY their own auctions
- 12. FR-12(S): The system should be able to automatically conclude an auction and announce the winner
- 13. FR-13(S): Authenticated users should be able to see their own profile
- 14. FR-14(C): Authenticated users could be able to see other user's profiles
- 15. FR-15(M): Authenticated users must be able to place bids on auctions
- 16. FR-16(M): Authenticated users cannot revert their bids, they are binding
- 17. FR-17(M): Authenticated users must be able to leave comments under specific auctions
- 18. FR-18(M): Authenticated users must be able to delete ONLY their own comments
- 19. FR-19(M): Administrators are not restricted to any functionality of the application
- 20. FR-20(M): Administrators must be able to edit any auction
- 21. FR-21(M): Administrators must be able to delete any auction
- 22. FR-22(M): Administrators must be able to delete any comment
- 23. FR-23(M): System must automatically get the latest bids for an auction, without having the user refresh the page
- 24. FR-24(M): System must automatically get the latest comments for an auction, without having the user refresh the page

Use Cases

UC-01

Use case: Log in the application

Related Functional Requirements: FR-01

Actor: User

Main Success Scenario:

- 1. User fills out credentials and confirms
- 2. System navigates user to website's home page

Extensions

- 1a. Credentials are incorrect
 - 1. System displays wrong credentials message
 - 2. Return to MSS step 1

UC-02

Use case: Log out of the application

Related Functional Requirements: FR-02

Actor: Authenticated user

Pre-Condition: Logged in the application

Main Success Scenario:

- 1. User clicks log out button
- 2. System navigates website's main page

UC-03

Use case: User creates account in the application

Related Functional Requirements: FR-03

Actor: User

Main Success Scenario:

1. User clicks button to create an account

- 2. System navigates user to "Register account" page
- 3. User fills account information
- 4. User clicks button to confirm
- 5. System displays success message

Extensions

- 1a. Details are incorrect
 - 1. System displays error message
 - 2. Return to MSS step 3

UC-04

Use case: Authenticated user adds an auction to the system

Related Functional Requirements: FR-04, FR-05

Actor: Authenticated user

Pre-Condition: Logged in the application

On the home page

Main Success Scenario:

- 1. User clicks button to create a new auction
- 2. User fills in auction's information
- 3. User clicks button to confirm
- 4. System adds auction to the system
- 5. System displays success message

Extensions

- 1a. Details are incorrect
 - 3. System displays error message
 - 4. Return to MSS step 2

UC-05

Use case: User sees all auctions in the application

Related Functional Requirements: FR-06, FR-07, FR-08

Actor: User

Pre-Condition: Logged in the application

On the home page

Main Success Scenario:

- 1. User chooses to see all live auctions
- 2. System displays all live auctions

Extensions

- 1a. User chooses to see all ended auctions
 - 1. System displays ended auctions
- 1b. User wants to search using filters
 - 1. User enters desired information and filters
 - 2. System displays found auctions

UC-06

Use case: User sees the details of a specific auction

Related Functional Requirements: FR-09

Actor: User

Main Success Scenario:

- 1. User clicks on a specific auction
- 2. System navigates user to the auction details page
- 3. System displays relevant auction details

UC-07

Use case: Authenticated user edits the details of an auction

Related Functional Requirements: FR-10

Actor: User

Pre-Condition: Viewing auction details

Main Success Scenario:

- 1. User clicks on button to edit details
- 2. System navigates user to the edit auction page
- 3. User fills in new information for auction
- 4. User clicks button to confirm
- 5. System displays success message
- 6. System navigates user back to auction details

Extensions

- 1a. Details are incorrect
 - 1. System displays error message
 - 2. Return to MSS step 3

UC-08

Use case: Authenticated user deletes an auction from the system

Related Functional Requirements: FR-11

Actor: User

Pre-Condition: Logged in the application

On the auction details page

Main Success Scenario:

- 1. User clicks button to delete auction
- 2. System asks for confirmation
- 3. System deletes auction
- 4. System displays success message

Extensions

- 1a. The auction has started
 - 1. System displays error message
 - 2. End of use case

UC-09

Use case: Authenticated user sees their profile

Related Functional Requirements: FR-13

Actor: User

Pre-Condition: Logged in the application

Main Success Scenario:

- 1. User clicks on button to view their profile
- 2. System navigates user to their profile page

UC-10

Use case: Authenticated user placed a bid on auction

Related Functional Requirements: FR-15

Actor: user

Pre-Condition: Logged in the application

Viewing auction details

Auction is live

Main Success Scenario:

- 1. User fills in amount to bid
- 2. User clicks button to bid
- 3. System asks for confirmation
- 4. System displays success message

Extensions

- 1a. Bid amount is less than the highest bid amount
 - 1. System displays error message
 - 2. End of use case
- 2a. Bid amount is less than the minimum bid amount
 - 1. System displays error message
 - 2. End of use case

UC-11

Use case: Authenticated user posts a comment on an auction

Related Functional Requirements: FR-17

Actor: User

Pre-Condition: Logged in the application

Viewing auction details

Main Success Scenario:

- 1. User fills in comment text
- 2. User clicks button to post comment
- 3. System displays user's comment

Extensions

1a. Auction has ended

- 1. System displays error message
- 2. End of use case

2a. No comment to post

- 1. System displays error message
- 2. End of use case

UC-12

Use case: Authenticated user deletes their comment

Related Functional Requirements: FR-18

Actor: User

Pre-Condition: Logged in the application

Viewing auction details

Main Success Scenario:

- 1. User clicks button next to their comment
- 2. System asks for confirmation
- 3. System removes user's comment

Extensions

1a. Auction has ended

- 1. System displays error message
- 2. End of use case

UC-13

Use case: Administrator edits an auction

Related Functional Requirements: FR-20

Actor: Administrator

Pre-condition: Logged in as an administrator

Viewing auction details

Main Success Scenario: Identical to UC-07

UC-14

Use case: Administrator deletes and auction

Related Functional Requirements: FR-21

Actor: Administrator

Pre-condition: Logged in as an administrator

Viewing auction details

Main Success Scenario: Identical to UC-08

UC-15

Use case: Administrator deletes a comment

Related Functional Requirements: FR-22

Actor: Administrator

Pre-condition: Logged in as an administrator

Viewing auction details

Main Success Scenario: Identical to **UC-12**