

URS

Student RoomR

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Version History

Version	Date	Changes	State
1.0	September 19, 2022	Initial release	Minimal

Distribution

Version	Date	Receivers
1.0	September 19, 2022	Frank Coenen & Marcel Boelaars

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1 Actors

1.1 Administrators

Administrators are users responsible for the registration of student and landlord accounts.

1.2 Landlords

Landlords are users that can create, update, and remove listings.

1.3 Students

Students are able to respond to any listings available. They can also view which listings they have previously responded to. They can:

- Respond to listings
- Communicate with landlords

2 Requirements

2.1 Non-Functional Requirements

1. **NFR-01: Software must be maintainable, extendable, and scalable**

For the initial launch the app will be limited to Eindhoven only. However, for future rollouts in other cities it is of the utmost importance that the app is well-maintained, extendable, and has the proper scalability to be able to sustain a larger use-base.

2. **NFR-02: Software must be secure**

Certain functionalities should only be available to certain users. As such, user authorization is necessary so that unauthorized people do not get access to secure data. User data should also be properly encrypted and secured where necessary.

2.2 Functional Requirements

1. **FR-01: Login to the website**

Any user with an account can log in to the website. What functionality is available depends entirely on the type of account.

2. **FR-02: Apply for an account**

Any user can apply for an account. The registration process differs depending on whether the application is for a landlord account or a student account. Administrators are able to approve or deny account requests.

3. **FR-03: View all active listings**

Any user can see all active listings that are available on the website.

4. **FR-04: View details of a listing**

Any user can view the details of a listing. Users do not have to log in to view details.

(a) **FR-04-C-01:** The details of a listing contains the following information:

- Address
- City
- Neighborhood
- Description
- Surface area in square meters
- Rent per month in Euro's

5. **FR-05: Respond to listing**

Students are able to respond to listings that interest them.

(a) **FR-05-C-01:** Only users logged in as students can respond to a listing.

(b) **FR-05-C-02:** A student can only respond once to a listing.

(c) **FR-05-C-03:** A student can respond to multiple listings at once.

6. **FR-06: Create new listings**

Landlords are able to create new listings.

(a) **FR-06-C-01:** Only users logged in as landlords can create new listings.

(b) **FR-06-C-02:** There is no limit to how many listings a landlord. can create

7. **FR-07: Update a listing**

Landlords can update any active listing that they have.

(a) **FR-07-C-01:** Certain information such as the deadline cannot be changed anymore after creation.

8. **FR-08: Remove listings**

Landlords can remove their own listings from the website

(a) **FR-08-C-01:** Administrators can remove any listing on the website

9. **FR-09: Close listing**

Landlords can close their own listings on the website

- (a) **FR-09-C-01:** Administrators can close any listing on the website

10. **FR-10: View account details**

All accounts can check their account details. They can also modify their account details.

- (a) **FR-10-C-01:** Users can only view their own account information.
- (b) **FR-10-C-02:** Users can only modify their own account information. Pilsner

11. **FR-11: Messaging functionality between landlord and tenant**

Once a student has been accepted, a support chat system should be enabled to allow for easy communication between landlord and tenant.

3 Use Cases

UC-01	Login to website
Actor	Student / Landlord / Administrator
Related FRs	FR-01
Pre-condition	<ol style="list-style-type: none">1. User is on login page2. User has an account
MSS	<ol style="list-style-type: none">1. User fills in their email and password2. User clicks on login button3. System authenticates login information4. System redirects to account page
Ext.	<ol style="list-style-type: none">1. Account authentication fails<ul style="list-style-type: none">• System displays an error message• Return to MSS step 1

UC-02	Apply for a student account
Actor	Unregistered users
Related FRs	FR-02
Pre-condition	<ol style="list-style-type: none"> 1. User is on student registration page 2. User does not have an account already
MSS	<ol style="list-style-type: none"> 1. User fills in the required info 2. User clicks on the "Send Registration" button 3. System checks if student ID and account email are not in use 4. System sends information to administrators for validation
Ext.	<ol style="list-style-type: none"> 1. Email address and / or student ID are already in use <ul style="list-style-type: none"> • System displays message that the information given is already in use • Return to MSS step 1

UC-03	Apply for a landlord account
Actor	Unregistered users
Related FRs	FR-02
Pre-condition	<ol style="list-style-type: none"> 1. User is on landlord registration page 2. User does not have an account already
MSS	<ol style="list-style-type: none"> 1. User fills in the required fields 2. User clicks on "Send Registration" 3. System 4. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-04	Browse available listings
Actor	T.B.D.
Related FRs	FR-03
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-05	View the details of a listing
Actor	T.B.D.
Related FRs	FR-04
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-06	Respond to listing
Actor	T.B.D.
Related FRs	FR-05
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-07	Create new listing
Actor	T.B.D.
Related FRs	FR-06
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-08	Update a listing
Actor	T.B.D.
Related FRs	FR-07
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-09	Remove a listing
Actor	T.B.D.
Related FRs	FR-08
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-10	Close a listing
Actor	T.B.D.
Related FRs	FR-09
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-11	View account details
Actor	T.B.D.
Related FRs	FR-10
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-12	Update account details
Actor	T.B.D.
Related FRs	FR-11
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-13	Send message to landlord
Actor	T.B.D.
Related FRs	FR-12
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X

UC-14	Send message to tenant
Actor	T.B.D.
Related FRs	FR-13
Pre-condition	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
MSS	<ol style="list-style-type: none"> 1. T.B.D. 2. T.B.D. 3. T.B.D.
Ext.	<ol style="list-style-type: none"> 1. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 2. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Return to MSS step X 3. T.B.D. <ul style="list-style-type: none"> • T.B.D. • Go to MSS step X