

Use Case Description

Authentication

Use Case Name	Register
Actor(s)	User, user database, sys admin
Summary	The user registers for the web shopping portal. Is a necessary condition to log-in later.
Pre-Condition	The user has an e-mail address she has access to. The website is online.
Post-Condition	The user is registered.
Basic Path	<ol style="list-style-type: none">1. The user clicks on "register"2. The user enters her name and surname.3. The user enters her e-mail.4. The user enters a password that matches the requirements.5. The user clicks on "register"6. The non-sensitive data from the user gets saved at the database.7. The sensitive data from the user (password) gets encrypted and saved at the database.8. The user gets notified that everything is ok.
Alternative Path	<p>3a. The e-mail adress is invalid, the user gets notified and has to change the e-mail address.</p> <p>4a. The user enters a password that doesn't match the requirements, the user gets notified and has to change the password.</p> <p>6a. The database is offline. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>6b. There is another problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>6c. The user is already registered. She gets notified and registration is not possible.</p> <p>7a. The database is offline. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>7b. There is another problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>7c. There is a problem with the encryption. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p>
Non-Functional Requirements	<ul style="list-style-type: none">• Error notification to SysAdmin• Entered password matches the requirements (at least one instance of: [capital letter, small letter, digit, special character] AND at least 7 chars in total)• (At least the) password needs to be stored encrypted in the database.

Use Case Name	Login
Actor(s)	User, user database, sys-admin
Summary	The user logs in to the web shopping portal.
Pre-Condition	The user is registered. The website is online.
Post-Condition	The user is logged in.

Basic Path	<ol style="list-style-type: none"> 1. The user clicks on "login" 2. The user enters her e-mail or username and her password. 3. The user clicks on "login" 4. The database finds the entered username/e-mail address 5. The database tries to match the entered password (or his hash etc.) with the one saved for the corresponding username/e-mail address (or his hash etc.). 6. The log-in gets saved in a cookie on the computer of the user. 7. The user gets notified that she is logged in.
Alternative Path	<p>2a. The user forgot her password and needs to reset it (see use case "Reset Password")</p> <p>4a. There is no such username or e-mail. The user gets notified and asked to register.</p> <p>4b. There is a problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>5a. The passwords don't match. The user gets notified.</p> <p>5b. There is a problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>6a. The user blocks cookies completely. She gets notified that she has to enable cookies if she wants to log-in.</p>
Non-Functional Requirements	Error notification to SysAdmin

Use Case Name	Reset Password (optional)
Actor(s)	User, user database
Summary	The user resets her password
Pre-Condition	<p>The user is registered.</p> <p>The website is online.</p>
Post-Condition	The has reset her password.
Basic Path	<ol style="list-style-type: none"> 1. The user clicks on "forgot password" 2. The user enters her e-mail or username. 3. The user clicks on "send reset-link" 4. The database finds the entered username/e-mail address 5. The backend sends an e-mail with a reset-link to the user's e-mail account. 6. The user clicks on the reset-link and gets redirected to the password reset page 7. The user enters a password that matches the requirements. 8. The user clicks on "save password" 9. The password gets encrypted and saved at the database. 10. The user gets notified that everything is ok and gets redirected to the login page.
Alternative Path	<p>4a. There is a problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>4b. The username/e-mail address does not exist in the database, the user gets notified that the username/e-mail address could not be found and is asked to enter another username/e-mail-address.</p> <p>5a. The e-mail could not be sent, the SysAdmin gets notified (notification path tbd)</p> <p>7a. The user enters a password that doesn't match the requirements, the user gets notified and has to change the password.</p> <p>9a. There is another problem with the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>9b. There is a problem with the encryption. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p>

Non-Functional Requirements	<ul style="list-style-type: none"> • Error notification to SysAdmin • Entered password matches the requirements (at least one instance of: [capital letter, small letter, digit, special character] AND at least 7 chars in total) • (At least the) password needs to be stored encrypted in the database.
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Add good/service

Use Case Name	Add advertisement
Actor(s)	User, mod, sys admin, advertisement database, evtl. photo database?
Summary	The logged in user creates an advertisement to sell or led goods or services
Pre-Condition	<p>The user is registered.</p> <p>The user is logged in.</p> <p>The website is online.</p>
Post-Condition	The advertisement is created. (The photos are uploaded.)
Basic Path	<ol style="list-style-type: none"> 1. The user clicks on "create advertisement". 2. The user specifies the type (good/service). 3. The user sets a title. 4. The user sets a price. 5. The user sets a description. 6. The user sets the location. 7. The user specifies if it's to sell or to rent. <ol style="list-style-type: none"> a. The user sets the status (available/lent) if it is to rent. 8. The user specifies if delivery is possible or not. 9. Optional: The user uploads photos. <ol style="list-style-type: none"> a. The user clicks on "upload photos". b. A system dialogue opens, she can choose photos to upload from her device. c. The photos get uploaded and stored at the advertisement database. 10. The user clicks on "confirm". 11. The advertisement awaits confirmation from an admin. 12. The advertisement gets confirmed and is set online.
Alternative Path	<p>4a. The price is a number <0. The user gets notified.</p> <p>9ca. The photos are too large or too numerous. The user gets notified.</p> <p>9cb. There is a problem with the (photo) database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>10a. Title, description, location invalid (too much characters for instance?)</p> <p>11a. The advertisement gets rejected by an admin. The user gets notified (and eventually penalized?).</p>
Non-Functional Requirements	<ul style="list-style-type: none"> • Maximum of available characters in title, description, location [?] • Maximum size of photos

Update advertisement

Use Case Name	Update advertisement
Actor(s)	User, mod, sys admin, advertisement database, evtl. photo database?
Summary	The logged in user chages an advertisement of which she is the owner

Pre-Condition	<p>The user is registered.</p> <p>The user is logged in.</p> <p>The website is online.</p> <p>The user is owner of the advertisement to change</p>
Post-Condition	The advertisement is changed. (The photos are updated.)
Basic Path	<ol style="list-style-type: none"> 1. The user clicks on “change advertisement”. 2. The user may change the type (good/service). 3. The user may change the title. 4. The user may change the price. 5. The user may change the description. 6. The user may change the location. 7. The user may change if it's to sell or to rent. <ol style="list-style-type: none"> a. The user sets the status (available/lent) if it is to rent. 8. The user may change if delivery is possible or not. 9. Optional: The user may change the photos. <ol style="list-style-type: none"> a. The user may click at a particular photo on “remove”. b. The user may click on “upload photos”. <ol style="list-style-type: none"> i. A system dialogue opens, she can choose photos to upload from her device. ii. The photos get uploaded and stored at the advertisement database. 10. The user clicks on “confirm”. 11. The updated advertisement awaits confirmation from an admin. 12. The updated advertisement gets confirmed and is set online.
Alternative Path	<p>4a. The price is a number <0. The user gets notified.</p> <p>9bii a. The photos are too large or too numerous.</p> <p>9bii b. There is a problem with the (photo) database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>10a. Title, description, location invalid (too much characters for instance?)</p> <p>11a. The advertisement gets rejected by an admin. The user gets notified (and eventually penalized?).</p>
Non-Functional Requirements	<ul style="list-style-type: none"> • Maximum of available characters in title, description, location [?] • Maximum size of photos

Remove advertisement

Use Case Name	Remove advertisement
Actor(s)	User, sys admin, advertisement database, evtl. photo database?
Summary	The logged in user changes an advertisement of which she is the owner
Pre-Condition	<p>The user is registered.</p> <p>The user is logged in.</p> <p>The website is online.</p> <p>The user is owner of the advertisement to remove</p>
Post-Condition	The advertisement is removed. (The photos are removed too.)

Basic Path	<ol style="list-style-type: none"> 1. The user clicks on "remove advertisement". 2. The user gets asked if she is sure to delete the advertisement. 3. The advertisement itself and all informations in the advertisement database are removed 4. (The linked photos in the photo database get removed.) 5. The user gets notified that her advertisement got removed.
Alternative Path	<p>1a. The user is not the owner of the advertisement. The user gets notified, removing is not possible. (The sys admin gets notified?)</p> <p>2a. The user clicks on "cancel". Nothing gets deleted, the user gets notified that she canceled the removing action.</p> <p>3a. The advertisement is missing the database. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p> <p>4a. The advertisement contains photos but they are missing the database/wrong referenced. The user gets notified that an error occurred. The sys admin gets notified that an error occurred.</p>
Non-Functional Requirements	None / ???

Open Questions

- validation of e-mail (contains '@', has a valid domain ending, etc.), password, price, etc. on the fly or only when the user confirms the entries?
- simultaneous upload of more than 1 photo ok?
- Is there a max of available chars for title, description, location, etc.?
- Does a user get penalized for rejected ads?
- When gets the sys admin exactly notified? For which types of errors?

TODO

- Clarify Non-Functional requirements of removing ads.
- Decide questions above and adapt use case descriptions.