

University of California, San Diego

CSE 110 FALL 2018

Team FTP



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### Priority

Low	Features that are nice to have but won't have majority effects on the system functionality.
Medium	Useful features that make the system run more effectively.
High	Must have features that are necessary to run the system.

### Status

C: Cancelled
N: Not started
IP: In progress
D: Done

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## **Introductory Essay**

It's very common that UC San Diego students choose to live off-campus. They have created a huge market for used furniture. However, there still exists no efficient way for trading used furniture. Currently, while students try to sell their used furniture by posting to many social media groups, potential student buyers scroll down hundreds of irrelevant posts on Facebook page to eventually find a furniture that was already sold. To save students from this painful process, we created Furnitrade, a web-based platform that aims to provide a clear and efficient furniture-trading solution for college students living off-campus. Furnitrade creates a faster way for sellers to reach buyers and an efficient way for buyers to browse furniture by category. Furnitrade's student-only ecosystem and engineered communication system also ensures trade credibility.

With Furnitrade, student sellers can advertise efficiently and manage all their sale posts in one place. Once registered with college email accounts, student sellers can access the marketplace of their school. They can advertise their used furniture by adding descriptions, pictures and categorical tags. After they click *post*, their used furniture will appear as a FurniCard on the market page and the entire school's potential buyers will be able to see the posts. In this way, student sellers no longer need to repeatedly copy-paste their furniture info to many social media; they can rest at ease after posting furniture with a few clicks. In addition,

Furnitrade's dashboard further enables sellers to manage their posted furniture in one place. In the dashboard, sellers can update furniture prices, add pictures or set sold flags. And all updates will be dynamically displayed across the marketplace. Managing all posts won't be easier.

Furnitrade also enables buyers to quickly browse furniture by category. They can select categories to find specific type of furniture. Since Furnitrade platform doesn't allow other irrelevant information, potential buyers will only be displayed with well-formatted FurniCards. FurniCards summarize the basic information of the searched/browsed furniture, including price, type and header picture. Through FuniCard, potential buyers can grasp a general idea about the most important aspects of the searched used furniture. If they want to know more, they can then click to expand FuniCards for detailed descriptions, usage, and etc. In this way, student buyers significantly save their time spent on searching and browsing.

Besides offering comprehensive support for both buyers and sellers, Furnitrade designed a credible, privacy-secured communication system. Unlike traditional social media trading pages that require users to expose personal information to public, Furnitrade securely keeps users' personal data in our database and never displays it with the public furniture posts. If buyers are interested in a specific posting, they can choose to submit request form to sellers, where they have an option to

reveal their contact info. Funitrade will automatically deliver the request forms to corresponding sellers and then sellers can decide whether to initiate the business. Funitrade's communication system guaranteed our users have a secured and credible trading experience.

Funitrade not only saves buyers time on searching and browsing furniture information, but also helps sellers to advertise and manage used furniture better. Our student-only and furniture-only ecosystem filter irrelevant information, while our communication system protects our users' privacy and ensures trading credibility. Funitrade will streamline the process of trading and make trading furniture an ease for students. In the future, our team will consistently grow and expand it from UC San Diego to many other alike universities. It is our goal to be the best future furniture trading web app.

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## UC1 -- User Signup

Priority	High
Status	Done
Description	The user creates an account by entering username, email, and password.
User Goal	The user wants to create an account because they need an account to access more features.
Desired Outcome	The user shall be able to create an account in the database.
Actor	Current user
Dependent use cases	N/A
Requirements	SR-1
Pre-conditions	The user wants to sell/buy a furniture, but don't have an account from the website.
Post-conditions	The user's account shall be saved in the database.
Trigger	The user wants to have an account to manage their information that separate from the other users.
Workflow	<ol style="list-style-type: none"> <li>1. The user shall click on the sign up button.</li> <li>2. The system shall take users to the sign up page.</li> <li>3. The user shall enter valid username, email, and password.</li> <li>4. The system shall create an account in the database.</li> <li>5. The system shall take users back to homepage.</li> </ol>
Alternative Workflow	<p>Invalid username</p> <ol style="list-style-type: none"> <li>1. User enter existed username.</li> <li>2. The system shall show warning sign saying "username exists".</li> </ol> <p>Invalid email address</p> <ol style="list-style-type: none"> <li>1. User enters something that is not recognizable as an email address.</li> <li>2. The system shall show warning sign saying "invalid email address".</li> </ol>

#### Invalid password

1. User enters nothing in password.
2. The system shall reject to create the account.

#### Retype password does not match

1. The input in retype password does not match the input previous input in password.
2. The system shall show warning sign saying "password doesn't match".

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## UC2 -- User Login

Priority	High
Status	Done
Description	The user logs in to the account using email and password.
User Goal	The user wishes to login in to the account.
Desired Outcome	The user shall be able to log in with their username and password.
Actor	Current user
Dependent use cases	UC-1
Requirements	SR-2
Pre-conditions	The user has created an account already and navigated to the login page.
Post-conditions	The user is logged in.
Trigger	The user is not logged in and wants to access the application.
Workflow	<ol style="list-style-type: none"> <li>1. User shall correctly enter the correct username and password.</li> <li>2. The system shall check the login information and redirect user to the home page.</li> <li>3. Now user shall have access to more features on the website.</li> </ol>
Alternative Workflow	<p>Incorrect password</p> <ol style="list-style-type: none"> <li>1. Users enter existed username but incorrect password.</li> <li>2. The system shall show warning sign saying "password incorrect".</li> </ol> <p>Incorrect username</p> <ol style="list-style-type: none"> <li>1. Users enter nonexited username.</li> <li>2. The system shall show waring sign saying "user does not exist".</li> </ol>

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### UC3 -- User Signout

Priority	High
Status	Done
Description	The user signs out.
User Goal	The user wants to sign out from the system.
Desired Outcome	The user signs out successfully.
Actor	Current user
Dependent use cases	UC-1 UC-2
Requirements	SR-3
Pre-conditions	The user has an account and has logged in already.
Post-conditions	The system terminates the user's session and take user back to home page.
Trigger	The user wants to sign out from the system.
Workflow	1. User shall find and click the "signout" button. 2. The system shall terminate the user's session. 3. The system shall take user back to home page.
Alternative Workflow	N/A

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## UC4 -- Forgot password

Priority	Medium
Status	Done
Description	If the user forgets their passwords when trying to log in, the system will send them an email contains the link to reset the password.
User Goal	The user wants to login to their account but forget the password and wish to recover it.
Desired Outcome	The user has a new password.
Actor	Current user
Dependent use cases	UC-1
Requirements	SR-4
Pre-conditions	The user has account but forget the password and is not yet logged in.
Post-conditions	The user is emailed a link to a form to reset the password.
Trigger	Users forget the password and wish to log in.
Workflow	<ol style="list-style-type: none"> <li>1. The user shall open login page of Furnitrade.</li> <li>2. The user shall click the "forget password" button.</li> <li>3. The system shall ask users for their email.</li> <li>4. The user shall enter the emails for their account.</li> <li>5. The system shall send an email to instruct users how to change passwords.</li> </ol>
Alternative Workflow	<p>The email enter is not found on database:</p> <ol style="list-style-type: none"> <li>4. The user shall enter anything but an valid email address.</li> <li>5. The system shall display an error message saying "email not found".</li> </ol>

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## UC5 -- Reset password

Priority	Medium
Status	Done
Description	The user has the option to reset their passwords in their profile page.
User Goal	The user wishes to change passwords when they try to edit their profile information.
Desired Outcome	The user is able to reset passwords successfully.
Actor	Current user
Dependent use cases	UC-3
Requirements	SR-6
Pre-conditions	The user signs in the account and they are on profile page.
Post-conditions	The user resets the passwords in profile page.
Trigger	The user wants to edit their profiles and change passwords during log in.
Workflow	<ol style="list-style-type: none"> <li>1. The user is logged in.</li> <li>2. The user is in the profile page.</li> <li>3. The user clicks on the "reset password" button.</li> <li>4. The system shall direct users to change the passwords.</li> </ol>

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## UC6 -- View User Profile

Priority	High
Status	Done
Description	The user can view the information of the account
User Goal	The user wants to view the information on the account.
Desired Outcome	The system shall direct user to the profile page and show user the account information and adjustment options.
Actor	Current user
Dependent Use Cases	UC-1 UC-2
Requirements	SR-5
Pre-conditions	The user signs in the account and accesses the profile page.
Post-conditions	The user shall be able to view the account information.
Trigger	The user wants to view account information.
Workflow	1. The user shall access the profile page. 2. The system shall take user to the profile page.
Alternative Workflow	N/A

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## UC7 -- Update User Profile

Priority	Medium
Status	In progress
Description	The user has the option to edit profile the information for their profiles.
User Goal	The user wishes to edit profile information
Desired Outcome	The system shall update the changes
Actor	Current user
Dependent Use Cases	UC-5
Requirements	SR-7
Pre-conditions	The user signs in the account and they are on profile page.
Post-conditions	The user makes changes in profile
Trigger	The user shall want to edit their profile.
Workflow	<ol style="list-style-type: none"> <li>1. The user shall make changes in the profile.</li> <li>2. The system shall update the changes.</li> </ol>
Alternative Workflow	<p>Invalid picture</p> <ol style="list-style-type: none"> <li>1. The user shall upload a file that is not recognized as a picture file.</li> <li>2. The system shall reject users from uploading that file.</li> </ol> <p>Invalid information</p> <ol style="list-style-type: none"> <li>1. The user shall upload invalid information.</li> <li>2. The frontend shall display a text “Please enter valid information”.</li> </ol>

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## UC8 – Post a Selling Item

Priority	High
Status	Done
Description	The user will be able to create and post a list item on the website.
User Goal	The user wants to sell a furniture.
Desired Outcome	The user posts their listings successfully.
Actor	Current user
Dependent Use Cases	UC-1 UC-2
Requirements	SR-10 SR-11 SR-12 SR-13
Pre-conditions	The user is logged in and want to sell an item.
Post-conditions	The user posts the item.
Trigger	The user needs to post their items so that they can sell them.
Workflow	<ol style="list-style-type: none"> <li>1. The user shall click on the "Sell something" page.</li> <li>2. The user shall add description of the item.</li> <li>3. The user shall upload at least one picture of the item.</li> <li>4. The user shall add tags for the item.</li> <li>5. The user shall add a pickup location.</li> <li>6. The user shall click on the "done" button.</li> <li>7. The system shall list user's item on the website.</li> </ol>
Alternative Workflow	<p>No description</p> <ol style="list-style-type: none"> <li>1. The user doesn't write description.</li> <li>2. The system shall reject to list the item and ask user to add description.</li> </ol> <p>No picture of the item</p> <ol style="list-style-type: none"> <li>1. The user doesn't upload any picture about the item.</li> <li>2. The system shall reject to list the item and ask user to upload pictures.</li> </ol> <p>No tags</p>

1. The user doesn't put tags on the item.
  2. The system shall reject to list the item and ask user to add tags.
- No pickup location or pick up location is invalid
1. The user doesn't add a pickup location or pick up location is invalid.
  2. The system shall reject to list the item and ask user to add pick up location.

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## UC--9 Edit Selling Furniture's Information

Priority	Low
Status	Canceled
Description	The user will be able to edit selling furniture's information (pictures, descriptions, etc.) after they post it.
User Goal	The user wants to change the information of a posted item.
Desired Outcome	The user shall update the information of a posted item successfully.
Actor	Current user
Dependent use cases	UC-2 UC-8
Requirements	SR-10
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is on the home page.</li> <li>2. The user is logged in to their account.</li> <li>3. The user has posted the furniture</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user has finished updating the furniture's information.</li> <li>2. The system has reflected changes at the furniture's detail page.</li> </ol>
Trigger	The user wants to edit or update furniture's information to sell the furniture.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses the sale page.</li> <li>2. The user requests to edit the sale information.</li> <li>3. The system shall direct the user to the edit page.</li> </ol>
Alternative Workflow	N/A

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## UC--10 Delete Selling Items

Priority	High
Status	Done
Description	The user will be able to delete an existing post from the website.
User Goal	The user wants to delete an existing post since they don't want to sell it anymore.
Desired Outcome	The user successfully deletes the item on sale.
Actor	Current user
Dependent use cases	UC-2 UC-8
Requirements	SR-11
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is on "My Furniture" page.</li> <li>2. The user is logged in to their account.</li> <li>3. The user has posted the furniture.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user has finished deleting the target item.</li> <li>2. The system has reflected changes at the category page.</li> </ol>
Trigger	The user has posted an item on the website but they don't want to sell it anymore.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses the furniture page.</li> <li>2. The user requests to delete a furniture sale post.</li> <li>3. The system shall delete the post.</li> </ol>
Alternative Workflow	N/A

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## UC--11 Find Furniture

Priority	High
Status	Done
Description	The user will be able to find a target furniture on the website by selecting specific category it belongs to.
User Goal	The user wants to find by category the furniture they are interested in.
Desired Outcome	The user finds the target furniture as desired.
Actor	Current user
Dependent use cases	UC-2 UC-8
Requirements	SR-15 SR-16
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is logged in.</li> <li>2. The system has the furniture which the user wants in the database.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user successfully finds the furniture they interested in.</li> <li>2. They system displays the specific furniture page.</li> </ol>
Trigger	The user has already had an account and they want to buy furniture from our website.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses the category page.</li> <li>2. The user chooses one of the categories.</li> <li>3. The system shall show a sub category list.</li> <li>4. The user chooses one of the subcategories.</li> <li>5. The system shall show the user the related furniture posts.</li> </ol>
Alternative Workflow	N/A

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## UC--12 Add Items to Wishlist

Priority	Medium
Status	Done
Description	The user is able to add the furniture they are interested in to wishlist.
User Goal	The user wants to store the information of interested furniture for later.
Desired Outcome	The user adds the item to wishlist.
Actor	Current user
Dependent use cases	UC-2 UC-11
Requirements	SR-13
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is at sub-category page.</li> <li>2. The user is logged in.</li> <li>3. The system has the furniture which the user wants to add to wishlist.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user adds the item to wishlist.</li> <li>2. The system stores this information in database.</li> </ol>
Trigger	The user is interested in an item and wants to record this information in their wishlist.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses a furniture post.</li> <li>2. The user requests to add the post into wishlist.</li> <li>3. The system shall add the post into wishlist.</li> </ol>
Alternative Workflow	<p>Furniture already in wishlist:</p> <ol style="list-style-type: none"> <li>1. The user tries to add the furniture which they already have in their wishlist.</li> <li>2. The system shall display an error message indicating the furniture already exists in wishlist.</li> </ol>

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## UC--13 Remove Items from Wishlist

Priority	Medium
Status	Done
Description	The user might change their idea over time and they might want to remove unwanted furniture from wishlist.
User Goal	The user wants to remove the furniture from wishlist.
Desired Outcome	The furniture is removed from wishlist.
Actor	Current user
Dependent use cases	UC-2 UC-12
Requirements	SR-21
Pre-conditions	1. The user is logged in. 2. The user has added the furniture in their wishlist.
Post-conditions	The furniture is removed from the user's wishlist.
Trigger	The user is no long interested in specific furniture stored in their wishlist.
Workflow	1. The user accesses wishlist. 2. The user requests to remove a post from the wishlist. 3. The system shall remove the post from the wishlist.
Alternative Workflow	N/A

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## UC--14 Send Request to The Seller

Priority	High
Status	Done
Description	The user as potential buyer sends a request to seller to show their interest in the furniture that the seller sells.
User Goal	The user wants to send a request to the seller so that the user can buy it.
Desired Outcome	The system sends an email to the seller and the message shows up in the seller's "Message" page.
Actor	Current user
Dependent use cases	UC-2 UC-11
Requirements	SR-17
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user as buyer is logged in.</li> <li>2. The other user as seller has posted the furniture on our website.</li> <li>3. The user (buyer) is in the detail page of the furniture that they want to buy.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user (buyer) sends request to the other user (seller).</li> <li>2. The system shall send email to the seller with the contact information of the user (buyer).</li> </ol>
Trigger	The user wants to contact the seller in order to buy the item they are interested in.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses a furniture sale post.</li> <li>2. The user submits a message to the seller.</li> <li>3. The system shall send the message to the seller's account.</li> <li>4. The system shall display the message on seller's end.</li> </ol>
Alternative Workflow	N/A

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## UC--15 View History

Priority	Medium
Status	Done
Description	The user views the list of furniture that they viewed before.
User Goal	The user wants to review an item they saw before.
Desired Outcome	The user sees a list of viewed items displayed by the system.
Actor	Current user
Dependent use cases	UC-2
Requirements	SR-14
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is logged in.</li> <li>2. The furniture which user viewed is posted on the website.</li> <li>3. The user has viewed the furniture.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The user shall see a list of viewed items.</li> </ol>
Trigger	The user wants to review the items which they have seen before but haven't added those items into wishlist.
Workflow	<ol style="list-style-type: none"> <li>1. The user requests to see the history page.</li> <li>2. The system shall direct the user to the history page which shows the previous viewed posts.</li> </ol>
Alternative Workflow	<p>The user has viewed nothing:</p> <ol style="list-style-type: none"> <li>1. The user viewed nothing on our website</li> <li>2. The system shall tell the user there's nothing in history.</li> </ol>

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## UC-16 Clear History

Priority	Medium
Status	Done
Description	The user clears and deletes view history.
User Goal	The user wants to clear view history.
Desired Outcome	The user shall delete history successfully and the system shall remove this information from the database.
Actor	Current user
Dependent use cases	UC-2 UC-15
Requirements	SR-20
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is logged in.</li> <li>2. The furniture which the user viewed has been posted to our website.</li> <li>3. The user has viewed this furniture.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The system shall remove the view history of the user.</li> </ol>
Trigger	The user wants to delete view history because they viewed many items and they want to keep their view history clean.
Workflow	<ol style="list-style-type: none"> <li>1. The user accesses the history page.</li> <li>2. The user requests to clear the saved posts in history page.</li> <li>3. The system shall clear all the posts saved in history page.</li> </ol>
Alternative Workflow	Empty History: <ol style="list-style-type: none"> <li>1. The user has viewed nothing on our website.</li> <li>2. The system shall show the user there's nothing in history.</li> </ol>

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## UC--17 View Message

Priority	Medium
Status	Done
Description	Once the user (seller) posts the item on websites, other users (buyers) may send request messages for the furniture. The user (seller) views the messages from “My Message” page.
User Goal	The user wants to view request messages from the other users.
Desired Outcome	The system displayed the messages from buyers to the sellers.
Actor	Current user
Dependent use cases	UC-2 UC-14
Requirements	SR-8
Pre-conditions	<ol style="list-style-type: none"> <li>1. The user is logged in.</li> <li>2. The user posted the furniture on our website.</li> <li>3. The buyer has sent the request message to the user.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. The system shows the list of messages received by the user.</li> </ol>
Trigger	The user wants to contact with the other users (buyers) who want to buy their furniture.
Workflow	<ol style="list-style-type: none"> <li>1. The user requests to see the information in message page.</li> <li>2. The system shall show the user all the messages.</li> </ol>
Alternative Workflow	<p>Empty Message</p> <ol style="list-style-type: none"> <li>1. No buyer has sent any message to the user.</li> <li>2. The system shall show the user there’s no message.</li> </ol>

## UC--18 About Us Page

Priority	Medium
Status	Done
Description	The user can get to know with the development team of this website.
User Goal	The user wants to see the information of this website's development team.
Desired Outcome	The system shall show each member of the development team and brief introduction for each member.
Actor	Current user
Dependent use cases	UC-1 UC-2
Requirements	SR-18
Pre-conditions	The user is logged in
Post-conditions	The system shall render the section that contains the information of the development team.
Trigger	When first visit the website, the user wants to know who develops this website and determine whether this website is trustworthy.
Workflow	<ol style="list-style-type: none"> <li>1. The user requests to access the About Us page.</li> <li>2. The system shall direct the user to the About Us section.</li> </ol>
Alternative Workflow	N/A

## DUC-19 Privacy Page

Priority	Low
Status	Done
Description	Before trading through our website, the user wants to acknowledge all the terms and conditions of furnitrade. The user views these legal details in Privacy page.
User Goal	The user wants to view the legal terms and conditions of furnitrade.
Desired Outcome	The system show the legal details to the user.
Actor	Current user
Dependent use cases	UC-1 UC-2
Requirements	SR-19
Pre-conditions	The user is logged in
Post-conditions	The system shows all the terms and conditions to the user.
Trigger	The user wants to use the website under legal protection.
Workflow	<ol style="list-style-type: none"> <li>1. The user requests to view the Privacy Policy.</li> <li>2. The system shall direct the user to the Privacy page.</li> </ol>
Alternative Workflow	N/A

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