Kyle Lim, Jaehong Lee, Jonah Chesnut

CptS 489 Trucker Broker Use Cases

# 1. Overview

This document contains use case tables for our team's trucker broker project. Each use case has a name, along with pre- and postconditions for the state of the website before and after each use case. The tables also have flow steps, in which the default flow outlines the basic steps a user would take to carry out the use case, and the alternate flow outlines how various conditionals could diverge from the default flow (alternate flows will use step numbers to show where they break off from the default flow). The diagrams will also have a related requirements section to outline the broad systems required for the use case to work, including other use cases when relevant. Finally, if there is any pertinent information to the use case that doesn't fit in any other section, there is an extra notes part of the table.

# 2. General

| Use-Case Name: | Account Registration |
|---|---|
| Preconditions: | None |
| Postconditions: | - User is created in database<br>- User is redirected to login page |
| Default Flow: | 1. User arrives on registration page from login or home page<br>2. User inputs email, name, and password<br>3. User selects trucker role<br>4. User inputs basic profile information. (i.e. truck information, load capacity, location) This can be skipped and changed later<br>5. Input information is checked to ensure valid formatting<br>6. Account is created and user is redirected to login page |
| Alternate Flow: | If user selects broker in step 3<br>4. User types their brokerage and selects an existing one from the search bar<br>5. Account is created and user is redirected to login<br>6. User will not be given brokerage specific permissions until a brokerage account approves them |
| Related Requirements: | - Brokerage account creation<br>- Registration page<br>- Account database |
| Extra Notes: | Brokerage accounts can be created by web admins, or other brokerage accounts can promote existing brokers for that company. |

| Use-Case Name: | Login |
|---|---|
| Preconditions: | - User's account already exists in database |
| Postconditions: | - User is logged into account<br>- User is redirected to appropriate overview page for their role |
| Default Flow: | 1. User reaches login page through home |

| | |
|---|---|
| | 2. User enters email and password |
| | 3. User hits login button |
| | 4. User's login information is verified |
| | 5. User is logged in and brought to the appropriate page for their role |
| Alternate Flow: | If user's login information is wrong after step 3 |
| | 4. User's login information fails verification |
| | 5. Failed to login message displayed |
| | 6. User inputs new login information |
| | 7. User is logged into account and brought to the appropriate page for their role |
| | If user cannot remember their login information |
| | 2. User hits forget password |
| | 3. User is given a form to submit email and hit send |
| | 4. If an account with that email exists, the user is sent an email with a new temporary password. |
| Related Requirements: | - Account Registration |
| | - Login page |
| | - Forget password page |
| | - Forget password email system |
| | - User overview pages |
| Extra Notes: | None |


| | |
|---|---|
| Use-Case Name: | Edit Profile |
| Preconditions: | - User is logged in |
| Postconditions: | - User's database entry is edited |
| | - User is redirected to their role's overview page |
| Default Flow: | 1. User selects edit profile in overview page |
| | 2. User is presented with forms of their account details filled in with their existing information |
| | 3. User can edit their existing information as they see fit |
| | 4. User clicks finish button when done |
| | 5. User's information is sanitized and its format is verified |
| | 6. User's database entry is updated |
| | 7. User returns to their role's overview page |
| Alternate Flow: | If user's input fails step 5 |
| | 5. User's information failed sanitation/verification |
| | 6. User is given a message telling them what input was invalid |
| | 7. User can change input and hit the finish button again |
| | 8. Return to default flow at step 5 |
| Related Requirements: | - User overview pages |
| | - Edit profile page |
| | - User database edit access |
| Extra Notes: | While the use case works the same for each role, the actual types of profile information to be edited will vary by role |

# 3. Trucker

| Use-Case Name: | View Job Details |
|---|---|
| Preconditions: | - User is logged in as trucker<br>- User has completed, agreed to, or is eligible for a job |
| Postconditions: | None |
| Default Flow: | 1. User arrives on the overview page<br>2. User scrolls to jobs section of page<br>3. User can see an overview of any current jobs they have selected, displaying the due date, a time countdown, and the destination city<br>4. User clicks on one of their current jobs to get additional details<br>5. User can see all available information about the job, including the load's status (picked up, waiting), the pickup and delivery addresses, and the broker's contact information.<br>6. User can click close to return to step 3 |
| Alternate Flow: | User wants to see potential jobs<br>    4. User scrolls past the current jobs section to the potential jobs<br>    5. User can see an overview any open jobs in their area that they fit the requirements of, showing what cargo it involves, how much it pays, how much time they have to deliver it, and who the broker is.<br>    6. User can click on the job to get more information, such as the broker's rating, the pickup and delivery addresses, how much time until the order expires, and is presented with a button to request the job<br>    7. User can click close to return to step 3<br>User wants to see past jobs<br>    5. User scrolls past the potential jobs section to the past jobs<br>    6. User can see an overview of their past jobs, showing the delivery outcome, where it was delivered to, what they were paid for it, and what the broker rated them.<br>    7. User can click on the job to get more information, such as the pickup and delivery addresses, how much time it took them, how early/late they were, and a description of why the broker rated them the way they did. |
| Related Requirements: | - Trucker overview page<br>- Job database access<br>- Job completion<br>- Trucker rating |
| Extra Notes: | In step 5 of potential jobs, if a broker has sent a job offer to a trucker, it will be highlighted and appear at the top of the list |

| Use-Case Name: | Accept Job |
|---|---|
| Preconditions: | - User is logged in as trucker<br>- User has been offered job (not required for alternate flow) |
| Postconditions: | - User has been given job information |

| | |
|---|---|
| | - New job shows in trucker's current jobs<br>- Job is moved to current for broker offering job |
| Default Flow: | 1. User checks potential job overview and sees job they have been offered<br>2. User checks details as outlined in view job details use case<br>3. User can contact job broker for additional information if necessary<br>4. User hits accept job button<br>5. Job moves to user's current job section |
| Alternate Flow: | If user hasn't been offered a job<br>   1. User checks potential job overview<br>   2. User views details of an open job they want to take as outlined in view job details use case<br>   3. User hits request job button, sending a message to the job's broker that they are available to take the job<br>   4. If the broker accepts the trucker's request, the job is moved to the trucker's current job section<br>If user declines offered job<br>   4. User hits decline job button<br>   5. Job remains in potential job section if job is still open, but is no longer highlighted as a job offer |
| Related Requirements: | - Trucker overview page<br>- Broker job offering<br>- Job database |
| Extra Notes: | None |

| Use-Case Name: | Complete Job |
|---|---|
| Preconditions: | - User is logged in as trucker<br>- User has a current job |
| Postconditions: | - Job is moved to past jobs for both trucker and broker<br>- Broker's rating is updated |
| Default Flow: | 1. Trucker clicks on the current job they just completed in their overview page<br>2. Trucker hits complete job button<br>3. Trucker is prompted to rate their broker<br>4. Trucker inputs rating, along with description elaborating on their rating<br>5. Trucker hits submit<br>6. Job moves to past jobs section on trucker overview |
| Alternate Flow: | Trucker chooses to defer rating<br>   4. Trucker hits skip rating<br>   5. Job moves to past jobs section on trucker overview<br>   6. Trucker can click the job in the past jobs section to rate the broker later (in case they want to wait for payment to go through or some other factor) |
| Related Requirements: | - Trucker overview page<br>- Trucker job acceptance |

| | |
|---|---|
| | - Broker job offering<br>- Job database |
| Extra Notes: | The trucker is the one to submit the job as completed, but the broker is the one to declare it as late or incomplete, and can rate the trucker poorly if they submit the job without completion, as well as report them through the appropriate channels. |

## 8. Broker

| Use-Case Name: | Create Job |
|---|---|
| Preconditions: | - User is logged in as a broker |
| Postconditions: | - Job is created and entered in job database<br>- Job shows up in potential jobs for eligible truckerss |
| Default Flow: | 1. Broker clicks create job button on their overview page<br>2. Broker enters job information in a form<br>3. Broker's input information is sanitized and its format is verified<br>4. Broker chooses open job selection<br>5. Broker clicks submit job button<br>6. Broker can now see job in their open jobs section |
| Alternate Flow: | Broker wants to offer job to specific trucker<br>4. Broker chooses offer job button<br>5. A table will appear with all of the truckers who fit the requirements the broker has input for the job<br>6. The broker can select a trucker to offer it to them specifically<br>7. The trucker can either accept or decline the job<br>8. If the trucker declines and the broker also selected the open job option, the job will appear for every qualified trucker, if not, it will only be seen by the broker, so they can choose a new trucker to offer it to. |
| Related Requirements: | - Broker overview page<br>- Trucker overview page<br>- Trucker view job details<br>- Trucker accept job<br>- Broker view job details<br>- Job database |
| Extra Notes: | None |

| Use-Case Name: | View job details |
|---|---|
| Preconditions: | - User is logged in as broker |
| Postconditions: | None |
| Default Flow: | 1. User arrives on the overview page<br>2. User scrolls to jobs section of page |

| | |
|---|---|
| | 3. User can see an overview of any current jobs they have given truckers, displaying the due date, a time countdown, and the destination city |
| | 4. User clicks on one of their current jobs to get additional details |
| | 5. User can see all available information about the job, including the load's status (picked up, waiting), the pickup and delivery addresses, and the trucker's contact information. |
| | 6. User can click close to return to step 3 |
| Alternate Flow: | User wants to see offered jobs |
| | 9. User scrolls past the current jobs section to the offered jobs |
| | 10. User can see an overview any jobs they have opened to anyone or offered to specific truckers, seeing an overview of those jobs information like payment and if any trucker's have offered to take the job |
| | 11. User can click on the job to get more information, such as the potential truckers' information, the pickup and delivery addresses, and how much time until the order expires. |
| | 12. User can click close to return to step 3 |
| | User wants to see past jobs |
| | 8. User scrolls past the offered jobs section to the past jobs |
| | 9. User can see an overview of their past jobs, showing the delivery outcome, what they paid for it, and what the trucker rated them. |
| | 10. User can click on the job to get more information, such as the pickup and delivery addresses, how much time it took the trucker, how early/late they were, and a description of why the trucker rated them the way they did. |
| Related Requirements: | - Broker overview |
| | - Trucker overview page |
| | - Trucker view job details |
| | - Trucker accept job |
| | - Trucker rate broker |
| | - Job database |
| Extra Notes: | Jobs that truckers have completed but the broker hasn't rated yet will appear at the top of the current job section |


| Use-Case Name: | Rate Trucker |
|---|---|
| Preconditions: | - User is logged in as broker |
| | - User had an open job with a trucker |
| | - Trucker marked that job as completed |
| Postconditions: | - Job moves to broker's past job section |
| | - Rating is available to trucker and factored into their overall rating |
| Default Flow: | 1. Broker scrolls to their current job section to see jobs their truckers marked as finished |
| | 2. Broker selects a specific job as outlined in view job details |
| | 3. Broker clicks the rate trucker button |

| | |
|---|---|
| | 4. Broker confirms whether the delivery was on-time, late, or not delivered at all. |
| | 5. Broker inputs a rating for the trucker, along with a description outlining their explanation. |
| Alternate Flow: | None |
| Related Requirements: | - Broker overview |
| | - Broker view job details |
| | - Trucker accept job |
| | - Trucker complete job |
| | - Job database |
| Extra Notes: | While truckers can defer rating their broker, broker cannot defer rating truckers, since a broker's rating is what determines if the order is actually complete or not after a trucker says it is. |

# 13. Brokerage

| Use-Case Name: | View Broker Information |
|---|---|
| Preconditions: | - User is logged in as brokerage account |
| | - Brokerage has brokers to view |
| Postconditions: | None |
| Default Flow: | 1. Brokerage user navigates to overview page |
| | 2. User scrolls to broker overview section |
| | 3. User can see all of their brokerage's brokers, with an overview showing their rating and completed orders |
| | 4. User can click on a broker page to see more details about them, such as their offered orders, current orders, and more details about their rating. |
| Alternate Flow: | None |
| Related Requirements: | - Brokerage overview |
| | - Trucker rate broker |
| | - Broker create job |
| | - User database |
| Extra Notes: | - Depending on the amount of brokers to a brokerage, the brokerage user may have to search for a broker rather than find them in a table. |
| | - The broker information section will appear at the top, but since a brokerage account is also a broker, they can also see normal broker items and access broker use cases |

| Use-Case Name: | Promote Broker |
|---|---|
| Preconditions: | - User is logged in as brokerage account |
| | - A broker to be promoted exists |
| Postconditions: | - Selected broker has brokerage permissions |
| Default Flow: | 1. Brokerage user finds and selects to-be-promoted broker as outlined in view broker information use case |
| | 2. User clicks promote broker button |

| | 3. User confirms their promotion decision |
|---|---|
| Alternate Flow: | None |
| Related Requirements: | - Brokerage overview<br>- User database |
| Extra Notes: | None |

| Use-Case Name: | Remove Broker |
|---|---|
| Preconditions: | - User is logged in as brokerage account<br>- Brokerage has brokers |
| Postconditions: | - Selected broker's account is deleted |
| Default Flow: | 1. Brokerage user finds and selects to-be-promoted broker as outlined in view broker information use case<br>2. User clicks delete broker button<br>3. User confirms the deletion decision |
| Alternate Flow: | None |
| Related Requirements: | - Brokerage overview<br>- User database |
| Extra Notes: | Access to brokerage permissions should be carefully handed out due to the access to this use case |

## 14.     Admin

| Use-Case Name: | Create Brokerage |
|---|---|
| Preconditions: | - User is logged in as admin |
| Postconditions: | - Brokerage is created |
| Default Flow: | 1. User clicks create brokerage button<br>2. User inputs all relevant brokerage information such as name, logo, locations, etc.<br>3. User confirms creation |
| Alternate Flow: | None |
| Related Requirements: | - Admin overview<br>- Brokerage database |
| Extra Notes: | None |

| Use-Case Name: | View Brokerage Information |
|---|---|
| Preconditions: | - User is logged in as admin<br>- Brokerage(s) exist in the database |
| Postconditions: | None |
| Default Flow: | 1. User clicks view brokerages button<br>2. User types in name of brokerage to view<br>3. User is shown information about the brokerage, such as the user count, its number of orders, and its rating<br>4. User is presented with options to edit the brokerage as outlined in other use cases |
| Alternate Flow: | If searched brokerage doesn't exist |

| | |
|---|---|
| | 3. User is given brokerage doesn't exist message |
| | 4. Search bar remains there for user to try again |
| Related Requirements: | - Admin overview |
| | - Brokerage database |
| Extra Notes: | None |

| | |
|---|---|
| Use-Case Name: | Create Brokerage Account |
| Preconditions: | - User is logged in as admin |
| | - The relevant brokerage already exists in the database |
| Postconditions: | - Brokerage account is created |
| | - New brokerage account is inserted into the brokerage |
| Default Flow: | 1. User is asked by a company to create a brokerage account |
| | 2. User selects relevant brokerage as outlined in view brokerage information use case |
| | 3. User clicks create brokerage account button |
| | 4. User inputs relevant information (name, email, password, etc.) |
| | 5. User's input is sanitized/its format verified |
| | 6. User submits information and account is created |
| Alternate Flow: | If user's input fails step 5 |
| | 5. User's information failed sanitation/verification |
| | 6. User is given a message telling them what input was invalid |
| | 7. User can change input and hit the finish button again |
| | Return to default flow at step 5 |
| Related Requirements: | - Admin overview |
| | - User database |
| | - Brokerage database |
| Extra Notes: | Brokerage account user should be informed of their login details as created by admin, as well as advised to change their password |

| | |
|---|---|
| Use-Case Name: | View User Information |
| Preconditions: | - User is logged in as admin |
| | - User(s) exist in the database |
| Postconditions: | None |
| Default Flow: | 1. User clicks view users button |
| | 2. User types in name of user to view |
| | 3. User is shown information about the user, such as their role, their rating, and their number of orders |
| | 4. User is presented with options to delete the user as outlined in delete account use case |
| Alternate Flow: | If searched brokerage doesn't exist |
| | 3. User is given user doesn't exist message |
| | 4. Search bar remains there for user to try again |
| Related Requirements: | - Admin overview |
| | - User database |
| Extra Notes: | None |

| Use-Case Name: | Delete Account |
| --- | --- |
| Preconditions: | - User is logged in as admin<br>- User(s) exist in the database |
| Postconditions: | - Selected user no longer exists in the database |
| Default Flow: | 1. Admin finds user to be deleted as outlined in view user information use case<br>2. Admin clicks delete user button<br>3. Admin confirms deletion |
| Alternate Flow: | None |
| Related Requirements: | - Admin overview<br>- View user information<br>- User database |
| Extra Notes: | This function should be a last resort and mostly unused due to the fact that brokerages can delete their own brokers and problematic truckers will presumably be rated low enough to be ignored anyway. |