
Group 07

Cadger
Use-Case Model and Use-Case Specifications

Version 1.0

Cadger	Version: 1.0
Use-Case Specifications	Date: 25/11/2022
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Revision History

Date	Version	Description	Author
25/11/2022	1.0		Group 07

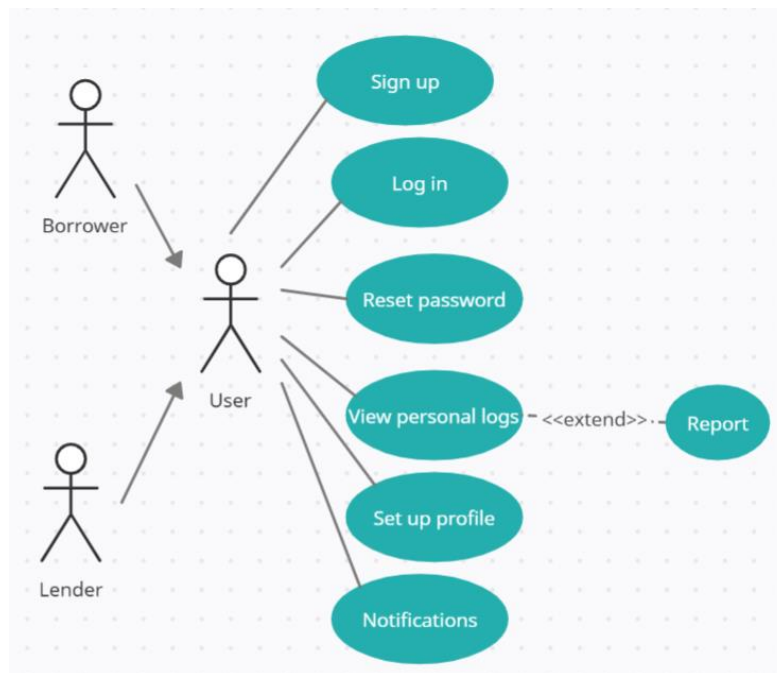
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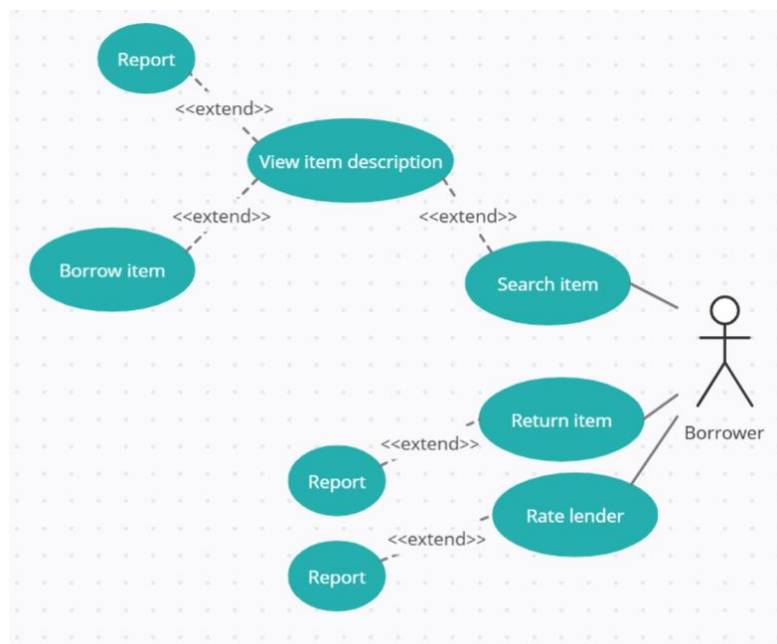
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1. Use-case Model

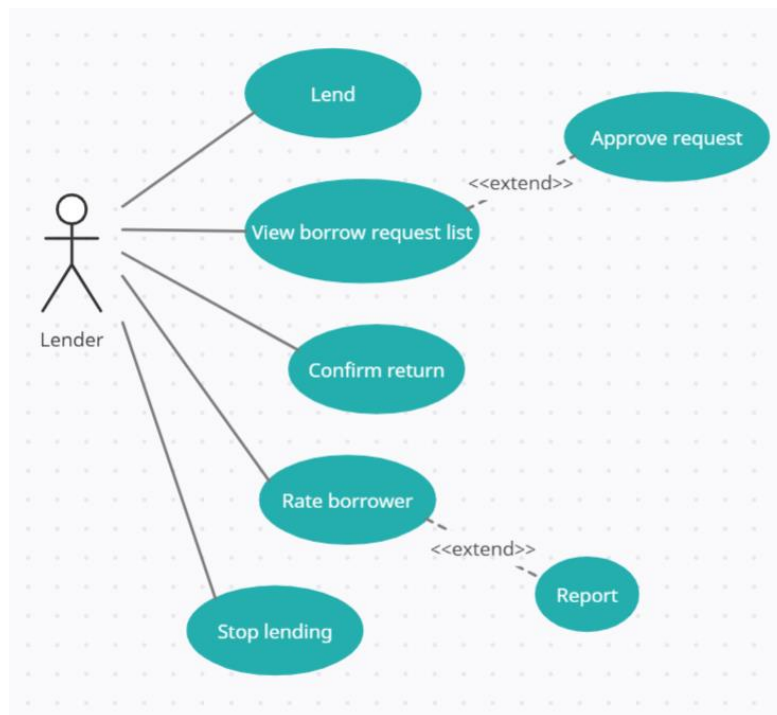


Basic functionalities of a user account

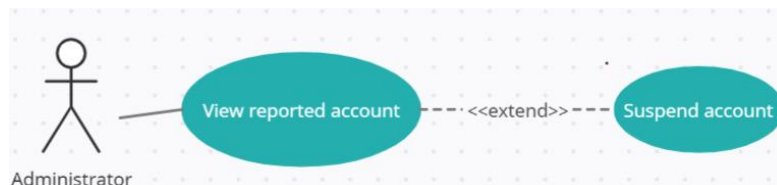


All use cases involve the Borrower

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All use cases involve the Lender



Use case for an Administrator account

2. Use-case Specifications

2.1 Use-case: Sign up

Use case Name	Sign up
Brief description	This use case describes how the Customer sign up.
Actors	Customer
Inputs	Unique username, unique password
Outputs	New account
Basic Flow	<ol style="list-style-type: none"> 1. At the login interface, the user selects on the 'Sign up' button 2. System displays sign up interface and requires the user enter username, password, confirm password 3. The user selects on 'Sign up' button 4. System validate username and password 5. System save user's data on the database 6. System moves the user back to login interface
Alternative Flows	<p>Alternative flow 1: Username is existed</p> <ol style="list-style-type: none"> 1. From #2 of the basic flow, user enters another username 2. Continue step #3 in the basic flow <p>Alternative flow 2: 2 passwords do not match</p> <ol style="list-style-type: none"> 1. From #2 of the basic flow, user enters another password 2. Continue step #3 in the basic flow

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Pre-conditions	User opens Cadger app
Post-conditions	The user successfully signs up the account

2.2 Use-case: Log in

Use case Name	Login
Brief description	This use case describes how the Customer login to the system.
Actors	Customer
Inputs	Username, password
Outputs	User's homepage
Basic Flow	<ol style="list-style-type: none"> 1. At the login interface, the user enters username and password 2. The user selects on the 'Login' button 3. System verifies account 4. System moves the user to homepage
Alternative Flows	Alternative flow 1: Account is not valid <ol style="list-style-type: none"> 1. From #1 of the basic flow, user enters another username and password 2. Continue step #2 in the basic flow
Pre-conditions	User opens Cadger app
Post-conditions	The user successfully logs in the account

2.3 Use-case: Forget password

Use case Name	Forget password
Brief description	Give the user who has an account a new password in case they forgot it.
Actors	User
Inputs	Phone number/Email, New password
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. User accesses the login page 2. The system displays the login page 3. User selects on the link "Forgot your password? Select here." 4. The system displays the account verification page. Allows users to authenticate through 2 methods: via phone number or via email. 5. User enters information: phone number or email. 6. The system checks whether the information is valid. 7. The system sends a link to create a new password for user (the link is valid in 15 minutes) via email (if user provides email) or sms message (if user provides phone number) 8. User accesses the link. 9. The system displays the page to create a new password. Ask the user to enter a new password and re-enter the newly created password. 10. User enters a new password and re-enters the password. 11. The system updates the new password and notifies success and returns to the login page.
Alternative Flows	Alternative flow 1: In step 4, user no longer uses the phone number they used for signing up <ol style="list-style-type: none"> 1. User selects on the link "I changed my phone number" 2. The display system requires the user to call the hotline number to be resolved. Alternative flow 2: In step 6, invalid information. The system displays an error message to the user and asks the user to re-enter the information. Alternative flow 3: In step 8, if the user accesses the expired link. The system displays the message "Session has expired" and returns to the login page. Alternative flow 4: In step 10, if the two passwords do not match. The system displays the message "Two passwords have to match. Please re-enter".
Pre-conditions	User must have already had an account.
Post-conditions	Password is updated

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2.4 Use-case: Set up profile

Use case Name	Profile set up
Brief description	Update user's information
Actors	User
Inputs	Full name, date of birth, gender, student ID, school name
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. From the homepage, the user selects on the profile setup page. 2. The system displays the profile setup page. 3. Users can view their own information (full name, date of birth, gender, student ID, school name) stored in the account and the user will select on the "edit" link next to each information to update information. 4. The system displays the update page corresponding to the information item selected by the user. 5. User enters new information and selects "save" button. 6. The system will update information and notify "update successfully". 7. The system returns to the profile setup page.
Alternative Flows	Alternative flow 1: In step 5, the user leaves the program without pressing the "save" button. Return to home page.
Pre-conditions	User must have already logged in.
Post-conditions	Profile page will be updated.

2.5 Use-case: Post an item for lending

Use case Name	Post an item for lending
Brief description	This use case describes how the Lender can post their item on Cadger.
Actors	Lender
Inputs	Name, description and a picture of an item
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. Lender accesses Personal Page. 2. System displays personal information, list of items,... and buttons for the following options: create, edit, delete. 3. Lender selects on create button. 4. System displays a form. 5. Lender provides an overview for the item, including a name, a description and a picture of the item. 6. Lender submits. 7. System checks all required information and updates new item in lender's list of items and in database. 8. The item is now available for borrowing. 9. System displays the item page.
Alternative Flows	Alternative flow 1: Lender doesn't go to Personal Page <ol style="list-style-type: none"> 1. From #1 of the basic flow, lender selects on the add button at the bottom navigation bar. 2. Continue step #4 in the basic flow Alternative flow 2: Lender doesn't fill in all required information in the form At #6 of the basic flow, system will pop up an alert for filling required.
Pre-conditions	Lender's account exists in Cadger and Lender logged in.
Post-conditions	The new item exists on the lender's list of item as well as on the Borrower's platform.

2.6 Use-case: Lend an item

Use case Name	Lend an item
Brief description	This use case describes how the Lender can lend their item on Cadger.
Actors	Lender, Borrower

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Inputs	
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. Lender receives a request(s) and a notification. 2. The lender goes to the item page. 3. System displays the item page. 4. Lender scrolls down to the requests list section. 5. System displays requests in chronological order. 6. Each request will appear as a request card, including the borrower's avatar and name, reasons for borrowing, borrow date, return date. At the top right there is an Approve button. 7. Lender selects on the approve button of a borrower and other requests will be automatically rejected. 8. Item status is changed to "Unavailable". 9. In Lending List on Personal Page, system displays the item and the borrower's name.
Alternative Flows	<p>Alternative flow 1: Lender doesn't go to Item Page</p> <ol style="list-style-type: none"> 1. From #1 of the basic flow, the lender goes to the notification page. 2. System displays list of notifications in chronological order. 3. Lender selects on a request notification. 4. System navigates the lender to that borrower's request card 5. Continue step #6 in the basic flow
Pre-conditions	Lender logged in.
Post-conditions	Other requests will be automatically rejected and the item status is changed to "Unavailable".

2.7 Use-case: Lender gets back an item

Use case Name	Lender gets back the item
Brief description	This use case describes how the Lender gets back the item.
Actors	Lender, Borrower
Inputs	Borrower's rating (and comment)
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. Lender goes to Lending List Section on Personal Page. 2. System displays list of lended items. 3. Lender selects on the item card. 4. The item shows the borrower's name, the borrowing schedule and a button to confirm return. 5. Lender selects on Confirm Return button. 6. System displays a borrower rating tab including a star rating and comment text area box. 7. Lender submits his/her rating of the borrower. 8. System records the confirmation and rating. The item status is changed to available. The new rating will appear on the review section of the borrower's personal page.
Alternative Flows	<p>Alternative flow 1: Lender forget to make confirmation for item returned. After being requested for returning, if the lender does not confirm returning on the item card, the system will notify the lender 1 hour after the return schedule.</p> <p>Alternative flow 2: Lender does not intend to provide a rating for the borrower.</p> <ol style="list-style-type: none"> 1. Lender selects the close button. 2. Continue step #8.
Pre-conditions	Lender logged in, item borrowed and in progress of returning.
Post-conditions	Item status is changed to available and ready to be borrowed.

2.8 Use-case: Borrower borrows an item

Use case Name	Borrower borrows an item
Brief description	This use case describes how the Borrower can borrow an item
Actors	Borrower, Lender
Inputs	Search keyword (filters), reasons for borrowing, borrow schedule
Outputs	Borrow request

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Basic Flow	<ol style="list-style-type: none"> 1. Borrower goes to the Home Page. 2. System displays list of existing item. 3. Borrower types in searching bar for a specific item. Borrower can select different filters to narrow down the list of items that they want to see 4. System displays valid results of items, each item including item name and item status. 5. Borrower selects one item to look for more information. 6. System displays the detail page of item, including lender's information, item description and review section from other borrowers. 7. Borrower selects on Borrow button. 8. System navigates to the Form Page. 9. Borrower is required to provide reasons for borrowing and borrow schedule. 10. Borrower selects Submit. 11. System records the request and sends it to the borrow request list of the item in the lender's personal page.
Alternative Flows	<p>Alternative flow 1: Borrower selects an unavailable item. System displays the detail page, same as step #6 of the basic flow. The only difference is the Borrow button is replaced with the Remind me button. This button will help to notify the borrower when the item is available.</p> <p>Alternative flow 2: No results match the search keywords. Borrower searches for another item and continue step #4, or the search process ends here</p>
Pre-conditions	Searching / Browsing does not require logging in, but borrowing do need an account.
Post-conditions	A new request is added up to the request list of the item.

2.9 Use-case: Borrower returns an item

Use case Name	Borrower returns an item
Brief description	This use case describes how the Borrower returns an item
Actors	Borrower, Lender
Inputs	Date and place for returning the item
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. Borrower goes to the Borrowing List in Personal Page. 2. System displays list of borrowing item. 3. Borrower selects an item card. 4. The item shows the borrowing schedule, the lender and a Return button. 5. Borrower selects on Return button. 6. System displays to a Form Tab including the item's name and some text input required to be filled in. 7. Borrower fills in the date and place for returning the item. 8. Borrower submits. 9. System records actions. 10. System displays a borrower rating tab including a star rating and comment text area box. 11. Borrower submits his/her rating of the item. 12. System records the return form and rating. The new rating will appear on the review section of the item.
Alternative Flows	<p>Alternative flow 1: Borrower doesn't go to Borrowing List in Personal Page</p> <ol style="list-style-type: none"> 1. If the returning date has come and the Borrower has not provided a returning request yet, system will notify the borrower in the notification section and sends an alert email. 2. Borrower selects on the Return option in the item returning alert 3. System navigates straight to the form tab on step #6 the continue with the basic flow.
Pre-conditions	Borrower has already logged in.
Post-conditions	A returning request, which includes specific date and place, will be sent to the lender.

2.10 Use-case: Report an account

Use case Name	Report an account
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Brief description	This use case describe how a user report another user account
Actors	Borrower and Lender
Inputs	Reasons for reporting
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. User selects a profile to report 2. User selects the “Report this account” button 3. System displays a report form with a “Reasons” box 4. User is required to fill in the reason why he/she is filing this report of this account 5. User selects the “Submit this report” button 6. System saves the report form to the “Reported accounts list”
Alternative Flows	<p>Alternative Flow 1: User does not fill in the “Reasons” box and attempts to submit</p> <ol style="list-style-type: none"> 1. System displays a red warning message: “*Required” 2. Continue step #4 <p>Alternative Flow 2: User does not want to submit the report anymore</p> <ol style="list-style-type: none"> 1. Anywhere before step #5, user selects the “Cancel” button 2. Application returns to the account’s profile page
Pre-conditions	User finds out the profile they want to report, either from one of these pages: personal log, item description, returning item, rating
Post-conditions	User successfully submits a report, and the report is saved in the “Reported accounts list” of an administrator account

2.11 Use-case: Suspend an account

Use case Name	Suspend an account
Brief description	This use case describe how an Administrator suspend a user account
Actors	Administrator (will be referred to as admin)
Inputs	
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. At the “Reported accounts list”, the admin selects a report form 2. System displays the report form 3. Admin selects “Suspend this account” 4. System displays a prompt for the admin to confirm the suspension decision 5. Admin selects “Confirm” 6. System sends a message to the suspended account: “Your account has been suspended due to violation of Cadger’s Terms of Service”
Alternative Flows	<p>Alternative Flow 1: Admin decides not to suspend the account</p> <ol style="list-style-type: none"> 1. At step #3 or step #5, admin selects the “Cancel” button 2. Application returns to the “Reported accounts list”
Pre-conditions	Admin goes to the “Reported accounts list” from the home page
Post-conditions	The suspended account cannot use any service provided by Cadger

2.12 Use-case: View personal logs

Use case Name	View personal logs
Brief description	This use case describes how a user view the personal logs
Actors	Borrower and Lender
Inputs	
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. At the Account interface, user selects the personal logs 2. System displays the history of all borrowing and lending activities from that user
Alternative Flows	<p>Alternative Flow 1: Customer has never borrowed or lent the items</p> <p>System displays “Empty” on the screen</p>
Pre-conditions	User has already logged in.
Post-conditions	System displays the logs screen

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2.13 Use-case: Notification

Use case Name	Notification
Brief description	This use case describe how a user view the notification
Actors	Borrower and Lender
Inputs	
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. At the homepage, user selects the notification icon 2. System displays the notification list
Alternative Flows	Alternative Flow 1: User has no notification System displays “Empty”
Pre-conditions	User has already logged in.
Post-conditions	System displays the notification screen

2.14 Use-case: Stop lending

Use case Name	Stop lending
Brief description	This use case describe how a lender stop lending the item
Actors	Lender
Inputs	
Outputs	
Basic Flow	<ol style="list-style-type: none"> 1. Lender selects an item that is not being borrowed by anyone from the lender’s list of items. 2. System displays the item information, along with a “Stop lending” button 3. Lender selects “Stop lending” 4. System displays a tab, asking for confirmation 5. Lender selects “Confirm” 6. The item is removed from Cadger
Alternative Flows	Alternative Flow 1: Lender selects an item that is currently being borrowed At step #2, the “Stop lending” button is grayed out and cannot be selected by the lender. The process stops here
Pre-conditions	Lender has already logged in and has posted at least 1 item
Post-conditions	The selected item is removed from Cadger