
Group 07

**Cadger
Vision Document**

Version 1.0

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| Cadger | Version: 1.0 |
| Vision (Small Project) | Date: 02/11/2022 |
| <document identifier> | |

Revision History

| Date | Version | Description | Author |
|------------|---------|-------------|----------|
| 10/11/2022 | 1.0 | | Group 07 |
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Vision (Small Project)

1. Introduction

The purpose of this document is to collect, analyze, and define high-level needs and features of Cadger. It focuses on the capabilities needed by the stakeholders and the target users, and why these needs exist. The details of how the Cadger system fulfills these needs are detailed in the use-case and supplementary specifications.

2. Positioning

2.1 Problem Statement

| | |
|--------------------------------|---|
| The problem of | lending and borrowing item from another student |
| Affects | the students in the same dormitory |
| the impact of which is | the student who does not want to buy the item that is used once and the student who wants to trial the item before buy it |
| a successful solution would be | helping student can lending and borrowing item easily |

2.2 Product Position Statement

| | |
|--------------------|---|
| For | students in the same dormitory |
| Who | lend and borrow the item |
| The (product name) | Cadger |
| That | allows students to lend the item that they no longer need to use and borrow the needed item |
| Our product | ensures the trust between lender and borrower is verified by their identities |

3. Stakeholder and User Descriptions

This section describes the stakeholders and users of Cadger. There are 2 types of accounts: Admin and student (lender, borrower).

3.1 Stakeholder Summary

| Name | Description | Responsibilities |
|-----------------|------------------|--|
| Group7 | Development Team | Responsible for project funding approval. Monitors project progress |
| Nguyen Minh Huy | Supervisor | Provide guidelines |
| Classmates | Student | Participate in reviewing the product |
| Group7 | Maintain Team | Represent the interests of the maintain team |

3.2 User Summary

| Name | Description | Responsibilities | Stakeholder |
|---------|--|---|------------------|
| Student | List the item that want to lend, request to borrow the item. | List the items to be lent and request to borrow | Self-represented |
| Admin | Moderate, remove spammers, hackers | Moderate the system | Self-represented |

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3.3 User Environment

The users are educated, computer literate and in most cases own personal phone using android system. Cadger will be limited to students in dormitory.

3.4 Summary of Key Stakeholder or User Needs

| Need | Priority | Concerns | Current Solution | Proposed Solutions |
|------------------|----------|---|--|--|
| Borrow items | High | Students look for an item but cannot find the right person to borrow | Students asking people, one-by-one, for information | An online platform similar to shopping websites where students can easily look for a specific item |
| Trying new items | Low | Students want to try new electronic appliances, equipment, tools,... before deciding to buy the item or not | Most shops don't let customers try using new devices | |

3.5 Alternatives and Competition

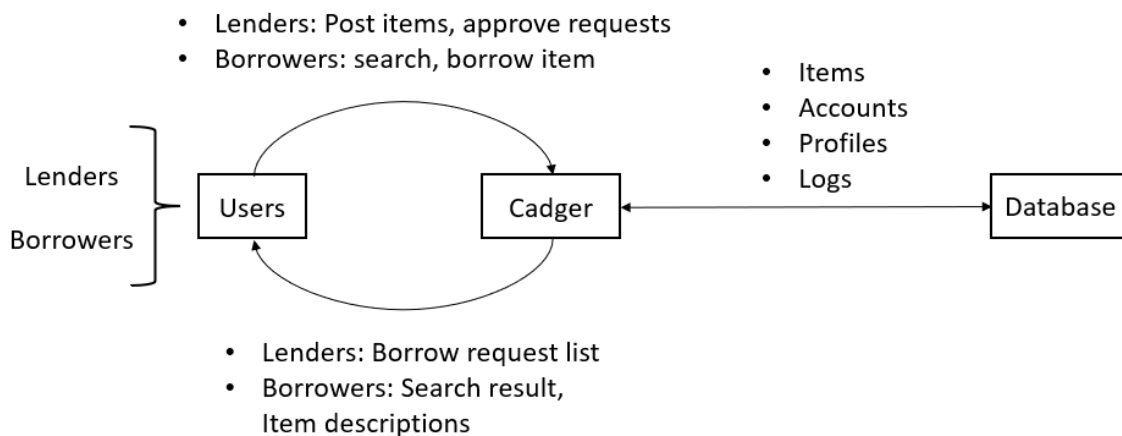
There are currently applications that also allow users to borrow items. For example: Mooch, BorrowMe, Peerby,...

4. Product Overview

TBD

4.1 Product Perspective

Cadger will consist of a client component (on Android smartphones), a server component and a database (as illustrated in the picture below). Any clients must install the client software in order to access the application.



4.2 Assumptions and Dependencies

TBD

5. Product Features

| No. | Name | Description | Priority |
|----------------|---------|---|----------|
| Account | | | |
| 1 | Sign up | Users provide a valid ID (also used as username) and a password in order to sign up an account on Cadger. | High |
| 2 | Log in | Users enter an ID and the correct password to log in to their accounts. | High |

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| 3 | Forget password | If users forget their accounts, they shall choose “Forget password”, which leads to a page where they can reset their passwords.. | Low |
| 4 | Profile setup | Users enter their personal information, including full name, day of birth, gender, department, avatar,..., to create a profile. Others can choose a specific user’s name to see his/her profile. | Low |
| Lend | | | |
| 5 | Lend | Users post an item that they can lend someone else on Cadger. Lenders need to provide an overview of the item, including a name, a detailed description and a picture of the item they post. | High |
| 6 | Borrow request list | Borrow requests and their information appear as a list for the lender. The lender selects a request to approve (other requests are automatically rejected). | High |
| 7 | Stop lending | Users select “Stop lending” to remove their item from Cadger. | Low |
| 8 | Confirm return | Lenders confirm that the borrower has returned the item, and the item is marked as available. | Medium |
| 9 | Rate borrower | Rate how reliable your borrower is (1-5). | Low |
| Borrow | | | |
| 10 | Search | Users can look/browse for a specific item. Users can select different filters to narrow down the list of items that they want to see. | Medium |
| 11 | Borrow | Users send a request to borrow the item to the lender. Users need to provide reasons for borrowing and borrow schedule. Users can request to borrow either available or unavailable items. For unavailable items, users need to schedule their date after the item has been returned. The system collects every request for each item and create a “Borrow request list”. | High |
| 12 | View item description | Each item has an overview with detailed information, written by its lender. | Low |
| 13 | Return item | Borrower asks to return the item back, and suggests the meeting point. The system automatically sends a “Thanks” message to the lender. | High |
| 14 | Rate lender | Users rate how much they like the item. | Low |
| Log | | | |
| 15 | History of borrowing activities | See what item the user borrowed. | Low |
| 16 | History of lending activities | See who borrowed the item. | Low |
| Administration | | | |
| 17 | Suspend an account | Moderator can suspend an account that violates Terms of service, or a malicious account | High |

6. Non-Functional Requirements.

- Encode all usernames and passwords
- The system should have the ability to handle a maximum of 150 users at a time.
- Total downtime from 7am to 23pm should not exceed 30 minutes
- Total downtime from 23pm to 7am should not exceed 10 minutes
- The application works on Android
- Each page must load within 1 second