Group ID: 07
Project name: Cadger
Prepared by: **Nguyễn Khải Phú**

Team members:
20127124 - **Đặng Bảo Châu** *Project manager*
20127062 - **Nguyễn Khải Phú** *Process engineer*
20127068 - **Hồ Minh Thanh Tài** *Business Analyst*
20127045 - **Võ Đình Khôi** *Test Manager*
20127406 - **Thái Cẩm Phong** *Software Engineer*

## 1. Summarize

Everyone worked productively and met their deadlines. Mr. Phong has worked exceptionally hard this sprint. Meeting times are not announced early enough, which has led to some members being late. In the future, meeting times will be posted 1 day in advance.

## 2. Screenshots of all tasks

- Bảo Châu

**Software Development Plan (Small Project)**

**1. Introduction**

**1.1 Purpose**

The purpose of the *Software Development Plan* is to gather all information necessary to control the project. It describes the approach to the development of the software and is the top-level plan generated and used by managers to direct the development effort.

The following people use the *Software Development Plan*:

- The **project manager** uses it to plan the project schedule and resource needs, and to track progress against the schedule.
- **Project team members** use it to understand what they need to do, when they need to do it, and what other activities they are dependent upon.

**1.2 Scope**

This *Software Development Plan* describes the overall plan to be used by the Cadger project, including deployment of the product

The plans as outlined in this document are based upon the product requirements as defined in the *Vision Document*.

**1.3 Overview**

This *Software Development Plan* contains the following information:

Project Overview — provides a description of the project's purpose, scope, and objectives. It also defines the deliverables that the project is expected to deliver.

Project Organization — describes the organizational structure of the project team.

**2. Project Overview**

**2.1 Project Purpose, Scope, and Objectives**

Description: Cadger creates a platform where people can share items. Sometimes, people do not want to buy something they will only use once. On Cadger, users can find and borrow any kind of items without wasting money. On the other hand, people who have stuff that they don't plan to use anymore can post their items on Cadger so that someone else in need of those might ask to borrow.

- Cadger gives users a way to try new electronic appliances, equipment, tools,... before deciding to buy the item or not
- Cadger allows users to borrow niche tools that might only be used once, so they don't have to actually buy the item

**2. Project Overview**

**2.1 Project Purpose, Scope, and Objectives**

Description: Cadger creates a platform where people can share items. Sometimes, people do not want to buy something they will only use once. On Cadger, users can find and borrow any kind of items without wasting money. On the other hand, people who have stuff that they don't plan to use anymore can post their items on Cadger so that someone else in need of those might ask to borrow.

- Cadger gives users a way to try new electronic appliances, equipment, tools,... before deciding to buy the item or not
- Cadger allows users to borrow niche tools that might only be used once, so they don't have to actually buy the item
- Cadger helps users find a chance to lend good but redundant items to other people that need them
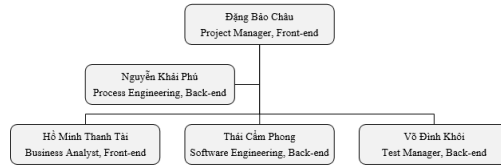
**2.2 Assumptions and Constraints**

TBD

**2.3 Project Deliverables**

Deliverables: mobile app on Android.

Deliverables for each project phase are indentified in the Developmennt Case. Deliverables are delivered towards the end of the iteration, as specified in section 4.2.4 Project Schedule.

### 3.    Project Organization

#### 3.1  Organizational Structure



#### 3.2  Roles and Responsibilities

| Person | Role |
|--------|------|
| Đặng Bảo Châu | Project Manager, Front-end. |
| Nguyễn Khải Phú | Process Engineering, Back-end. |
| Hồ Minh Thanh Tài | Business Analyst, Front-end. |
| Thái Cẩm Phong | Software Engineering, Back-end. |
| Võ Đinh Khôi | Test Manager, Back-end. |

● Khải Phú

### 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 |
| Duong Minh Tung, Nguyen Minh Van | Student | Participate in reviewing the product |
| Group7 | Maintain Team | Represent the interests of the maintain team |

#### 3.2  User Summary

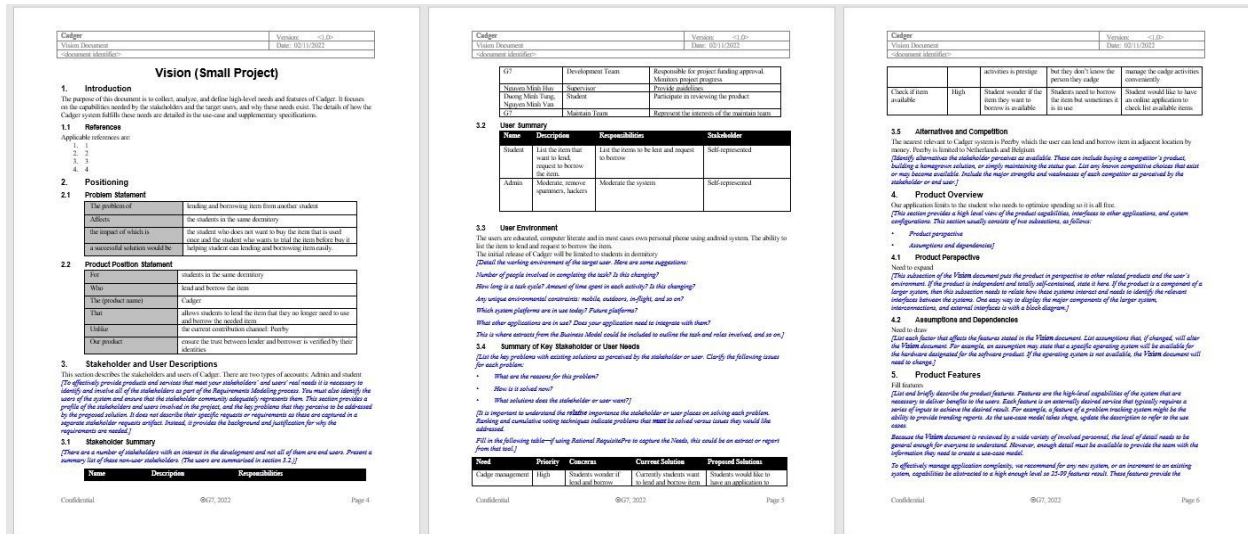| Name | Description | Responsibilities | Stakeholder |
|------|-------------|------------------|-------------|
| Student | List the item that want to lend, request to borrow the item. | List the items to be lent and request to borrow | Self-represented |

### 5.    Product Features

#### 5.1   Sign up, Log in, Forget password

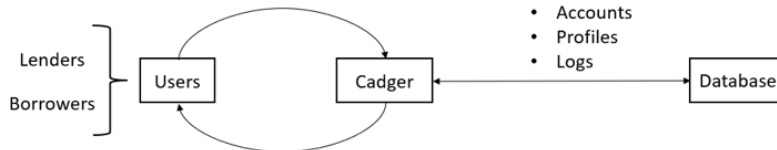| No. | Name | Description | Priority |
|-----|------|-------------|----------|
| | | **Account** | |
| 1 | Sign up | Users provide a valid ID (also used as username) and a password in order to sign up an account on Cadger. | High |
| 2 | Log in | Users enter an ID and the correct password to log in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

- **Cẩm Phong**



- Lenders: Post items, approve requests
- Borrowers: search, borrow item
- Items
- Accounts
- Profiles
- Logs

Lenders / Borrowers → Users → Cadger → Database

- Lenders: Borrow request list
- Borrowers: Search result, Item descriptions

- **Đình Khôi**

## 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 |
| Unlike | the current contribution channel: Peerby |
| Our product | ensure the trust between lender and borrower is verified by their identities |

- Thanh Tài

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              Đặng Bảo Châu
              Project Manager

      Nguyễn Khải Phú
      Process Engineering

Hồ Minh Thanh Tài    Thái Cẩm Phong      Võ Đình Khôi
Business Analyst     Software Engineering  Test Manager
```

**3.2 Roles and Responsibilities**

| Person | Role |
|---|---|
| Đặng Bảo Châu | Project Manager |
| Nguyễn Khải Phú | Process Engineering |
| Hồ Minh Thanh Tài | Business Analyst |
| Thái Cẩm Phong | Software Engineering |
| Võ Đình Khôi | Test Manager |

## 4. Management Process

**4.1 Project Estimates**

None.

**4.2 Project Plan**

Sprint 1 – PA1

bắt đầu: 31/10/2022

kết thúc: 14/11/2022

task: (phân công ai làm gì làm gì…) + gantt chart (deadline)

output sau khi kết thúc Sprint 1: document về project plan và vision

Sprint 2 – PA2

bắt đầu: 14/11/2022

kết thúc: 28/11/2022

task: (phân công ai làm gì làm gì…) + gantt chart (deadline)

output sau khi kết thúc Sprint 2: document về project plan và chi tiết hóa vision document, use-case model, use-case specification.

Sprint 3 – PA3

bắt đầu: 28/11/2022

kết thúc: 12/12/2022

task: (phân công ai làm gì làm gì…) + gantt chart (deadline)

output sau khi kết thúc Sprint 3: use-case specification 2nd, define software architecture, class diagram.

Sprint 4 – PA4

bắt đầu: 12/12/2022

kết thúc: 26/12/2022

task: (phân công ai làm gì làm gì…) + gantt chart (deadline)

output sau khi kết thúc Sprint 4: revise software architecture document (SAD), UI prototype.

Sprint 5 – PA5

bắt đầu: 26/12/2022

kết thúc: 09/01/2023

task: (phân công ai làm gì làm gì…) + gantt chart (deadline)

output sau khi kết thúc Sprint 5: test plan and test cases, project presentation, final submission.