

DPPL-xx

SOFTWARE DESIGN DESCRIPTION

ON TIME!2

for:

Software Engineering Laboratory

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|  | Informatics Study Program Telkom University | Document Number | | Page |
| | | <i>DPPL-XX</i> <xx:no grp> | | <#>/<number # |
| | | Revision | <revision number> | <i>Date: <fill in date></i> |

LIST OF CHANGES

| Revision | Description |
|----------|-------------|
| A | |
| B | |
| C | |
| D | |
| E | |
| F | |
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| INDEX DATE | - | A | B | C | D | E | F | G |
|-----------------|---|---|---|---|---|---|---|---|
| Written by | | | | | | | | |
| Review by | | | | | | | | |
| Approve d by | | | | | | | | |

List of Changes

| Pages | Revised | Pages | Revised |
|-------|---------|-------|---------|
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1. Introduction

1.1 Purpose of Document

The purpose of this document is to present a detailed description of our application called “On Time!”. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, and the constraints under which the system must operate. This document is intended to be used as a reference for developing the initial version of the On time! application for the development team

1.2 Scope of the Problem

On time! is a reminder app with a mobile application method. It will allow users to set a reminder of an event and will be notified by a ringtone. So, that the users will not miss any event that has been marked in this application. On time! is a reminder app with a mobile application method. It will allow users to set a reminder of an event and will be notified by a ringtone. So, that the users will not miss any event that has been marked in this application.

1.3 Definitions and Terms

All definitions and abbreviations used in this document and their explanations

1.4 References

OT Documentation referenced by this document, at least SKPL

Books, Guides, other Documentation used in this document (rarely!).

-Insert the SKPL as a reference.

1.5 Systematic Discussion

Our document will describe a software design made with the object-oriented approach. This document will explain all the physical forms of the app Ontime! in detail, including the data's description, a library of the data, a physical decomposition of the module and a concise description of the system interface design. The document is aimed to describe the requirements of the software that was made.

2 Description of Global

2.1 Design Implementation Environment Design

| Reminder System | Spesification |
|--------------------|--|
| Operating System | Windows 10/Windows 11/ Linux |
| DBMS | MySQL |
| Development tools | Visual Studio Code and XAMPP |
| Filing System | Sistem harga, Sistem tanggal, dan Sistem lokasi, sistem kecenderungan dikunjungi |
| Bahasa Pemrograman | Html, Javascript, ReactJS, and PHP |

2.2 Architectural Description

Architectural Description is the result of a set of practices for representing, communicating, and analyzing a software architecture (also known as architecture rendering) and the application of such practices by work products that represent the software architecture.

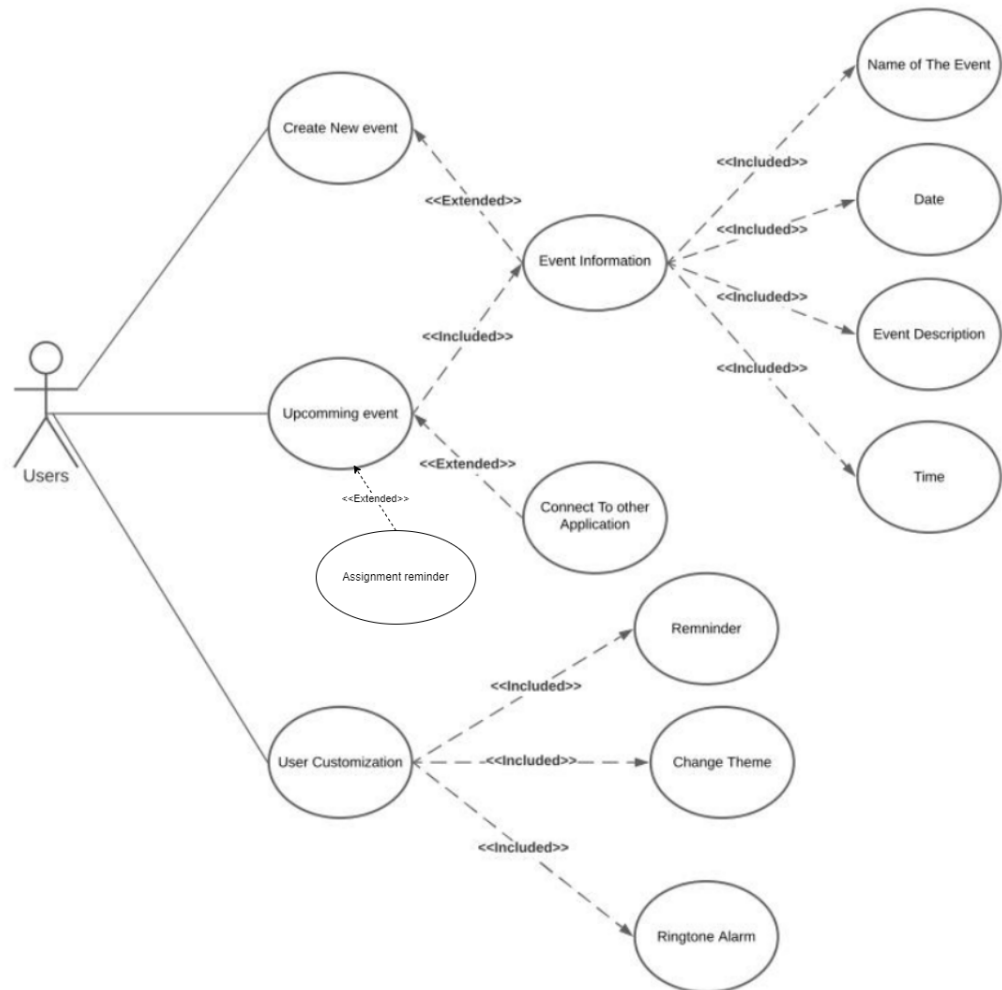
2.3 Component Description

Filled with a list of modules. The list of modules can be in the form of the following table:

| No | Component Name | Detailed |
|----|------------------------------|--|
| 1. | User | The one whole used the web |
| 2. | Login | Menu to access another menu |
| 3. | Main page | Main menu that user can see everything on it |
| 4. | Create event | Menu to create a new event |
| 5. | See Upcoming Event | Menu to see upcoming event |
| 6. | Customize the web | Menu for user to customize the web |
| 7. | Link to other app | Menu to linked with another app |
| 8. | See Information of the event | Menu for user to see the detailed information of the event |

3 Design

3.1 Realization Use Case



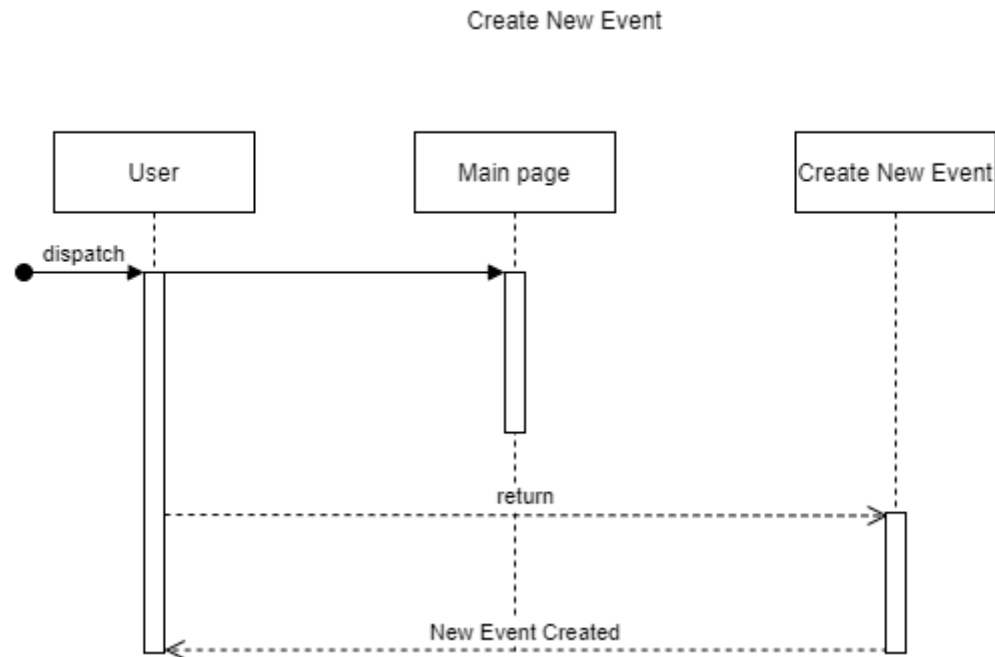
3.1.1 Create New event

For this use case, the user can create a new event for himself manually. So that they can customize what kind of event they want to make.

3.1.1.1 Class Identification

| No | Class Name | Detailed |
|----|------------------|------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | Create New event | Create New Event |

3.1.1.1.1 Sequence Diagram



3.1.1.1.1 Class Diagram

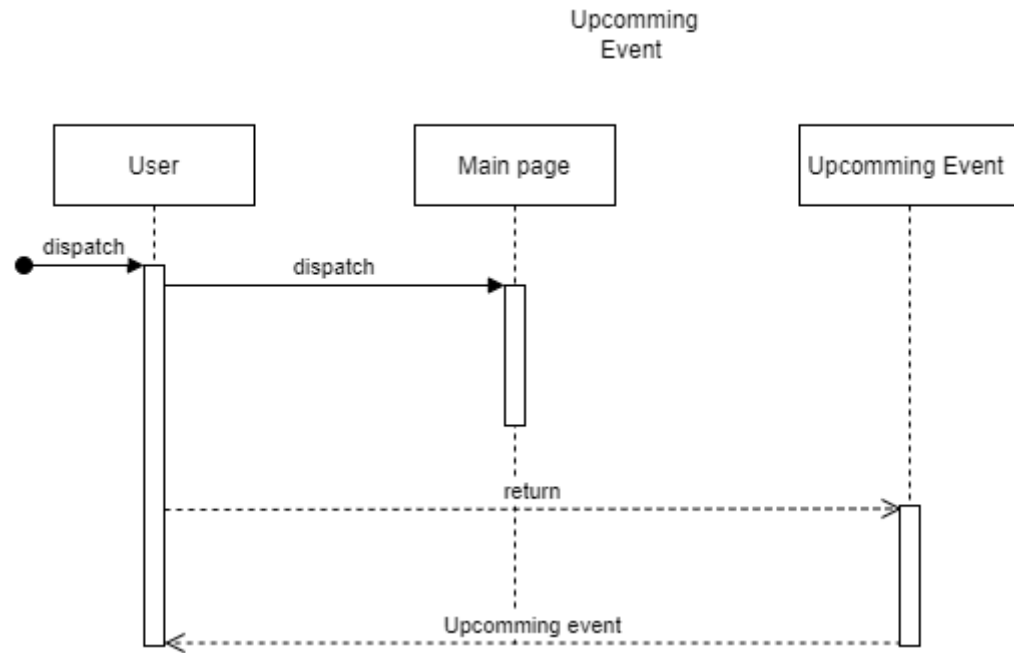
3.1.2 Upcoming Event

For this use case the user can see upcoming events that are made by the user itself or maybe from the event from the connected application.

3.1.2.1 Class Identification

| No | Class Name | Detailed |
|----|----------------|----------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | Upcoming event | Upcoming event |

3.1.2.1.1 Sequence Diagram



3.1.2.1.1.1 Class Diagram

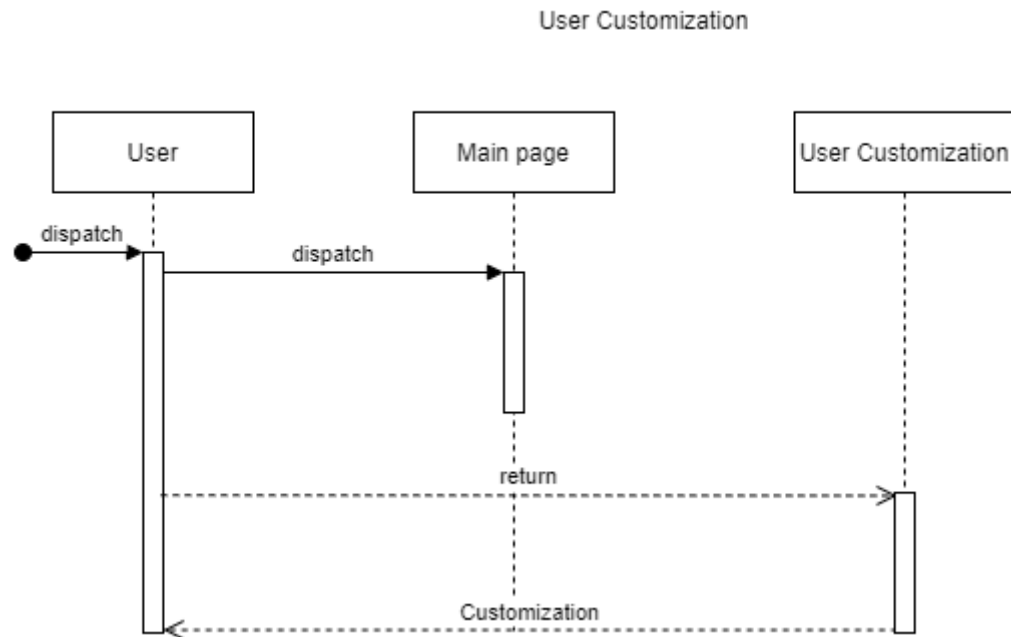
3.1.3 User Customization

Users can customize their reminder, ringtone or theme.

3.1.3.1 Class Identification

| No | Class Name | Detailed |
|----|--------------------|--------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | User Customization | User Customization |

3.1.3.1.1 Sequence Diagram



3.1.3.1.1.1 Class Diagram

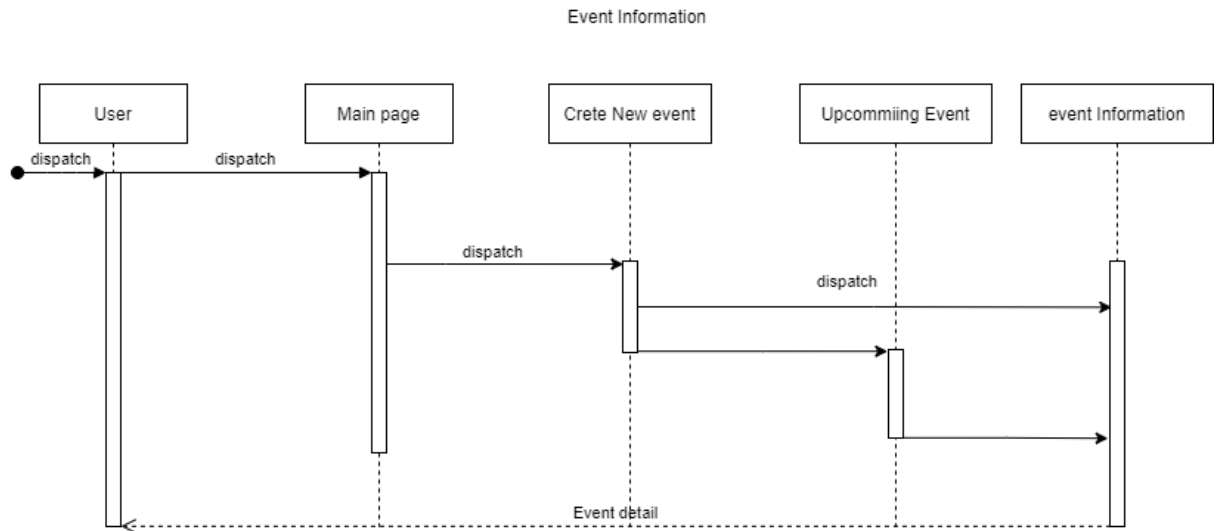
3.1.4 Event Information

In this use case, the user can see the information that has been set, from the name of the event, date, time etc.

3.1.4.1 Class Identification

| No | Class Name | Detailed |
|----|--------------------|--------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | User Customization | User Customization |

3.1.4.1.1 Sequence Diagram



3.1.4.1.1.1 Class Diagram

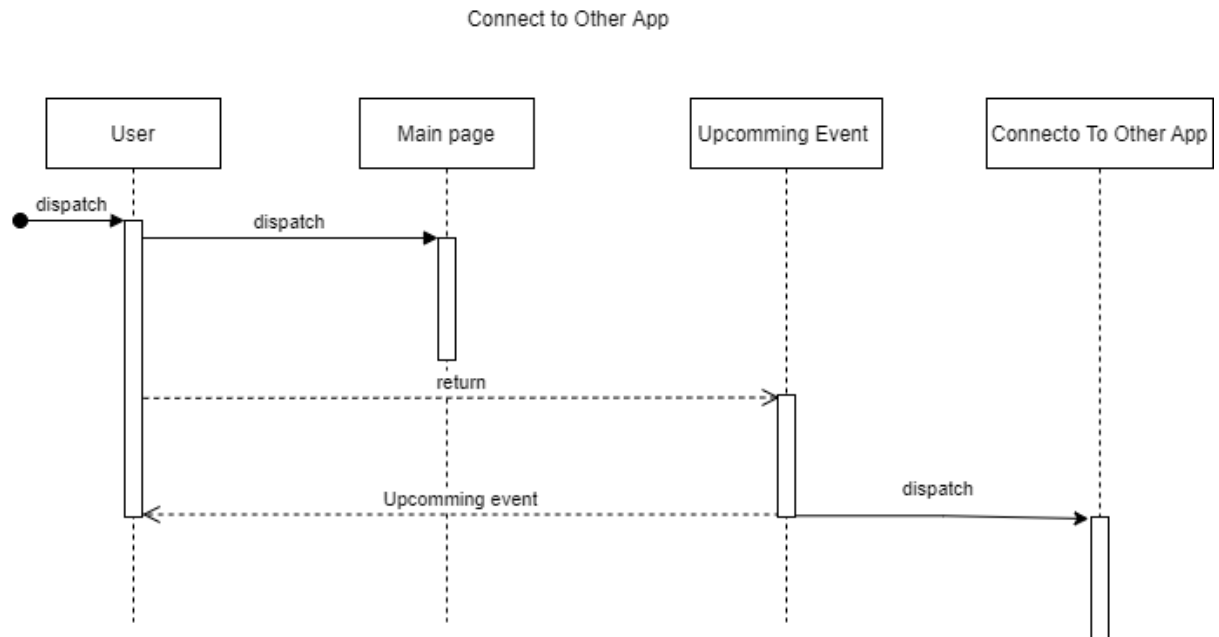
3.1.5 Connect To Other App

From this use case, the user can connect to other apps. For example LMS so that the timeline on LMS can be displayed and remembered in our app.

3.1.5.1 Class Identification

| No | Class Name | Detailed |
|----|----------------------|----------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | Upcoming Event | Upcoming Event |
| 4. | Connect to Other App | Connect to Other App |

3.1.5.1.1 Sequence Diagram



3.1.5.1.1.1 Class Diagram

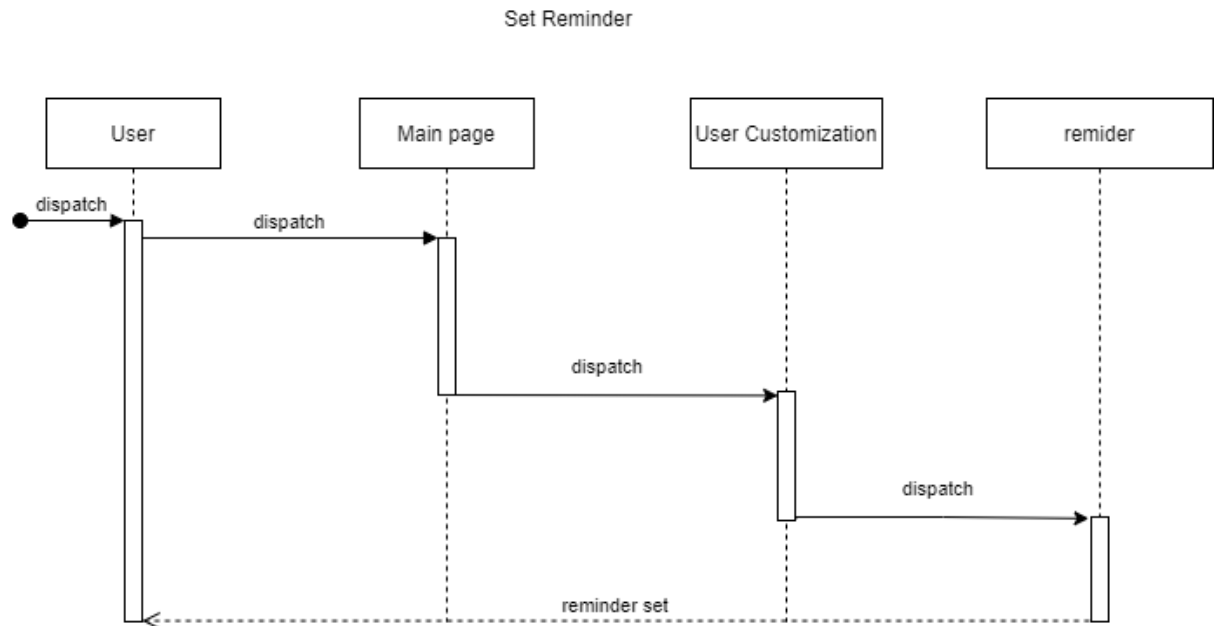
3.1.6 Reminder

The main feature, where the user will be notified if something is on.

3.1.6.1 Class Identification

| No | Class Name | Detailed |
|----|--------------------|----------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | User Customization | Upcoming Event |
| 4. | reminder | reminder |

3.1.6.1.1 Sequence Diagram



3.1.6.1.1.1 Class Diagram

3.1.7 Change Theme

The user can change them to user customization.

3.1.7.1 Class Identification

| No | Class Name | Detailed |
|----|--------------------|--------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | User Customization | User Customization |
| 4. | Change theme | Change theme |

3.1.7.1.1 Sequence Diagram

3.1.7.1.1.1 Class Diagram

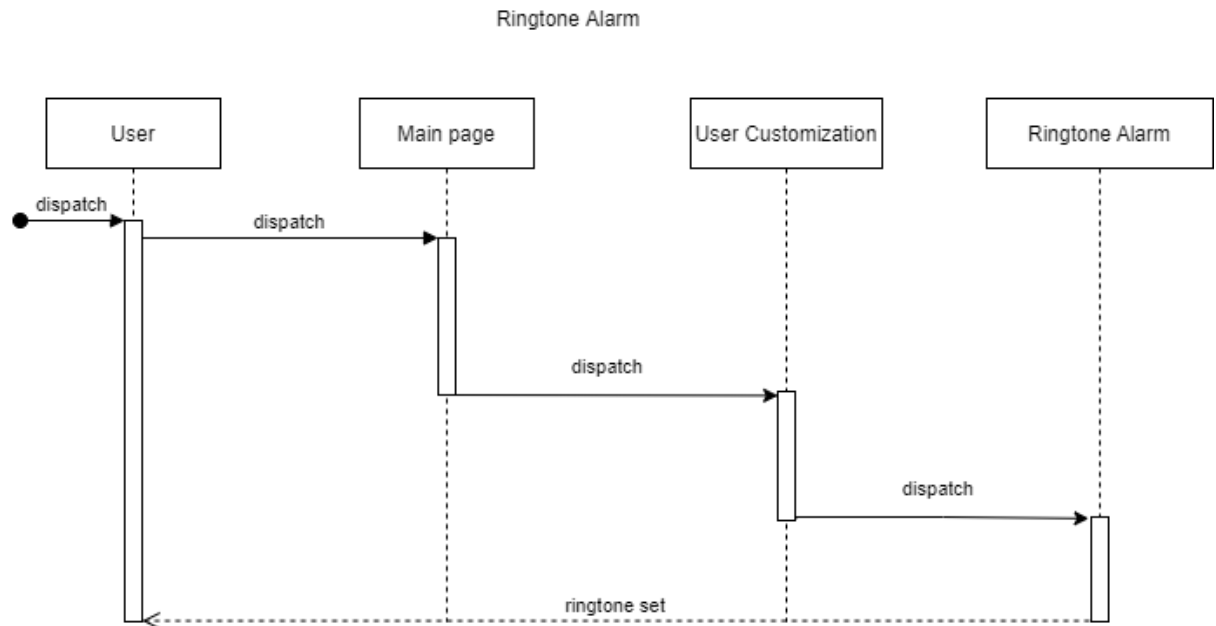
3.1.8 Ringtone Alarm

User can set ringtone

3.1.8.1 Class Identification

| No | Class Name | Detailed |
|----|----------------------|----------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | Upcoming Event | Upcoming Event |
| 4. | Connect to Other App | Connect to Other App |

3.1.8.1.1 Sequence Diagram



3.1.8.1.1.1 Class Diagram

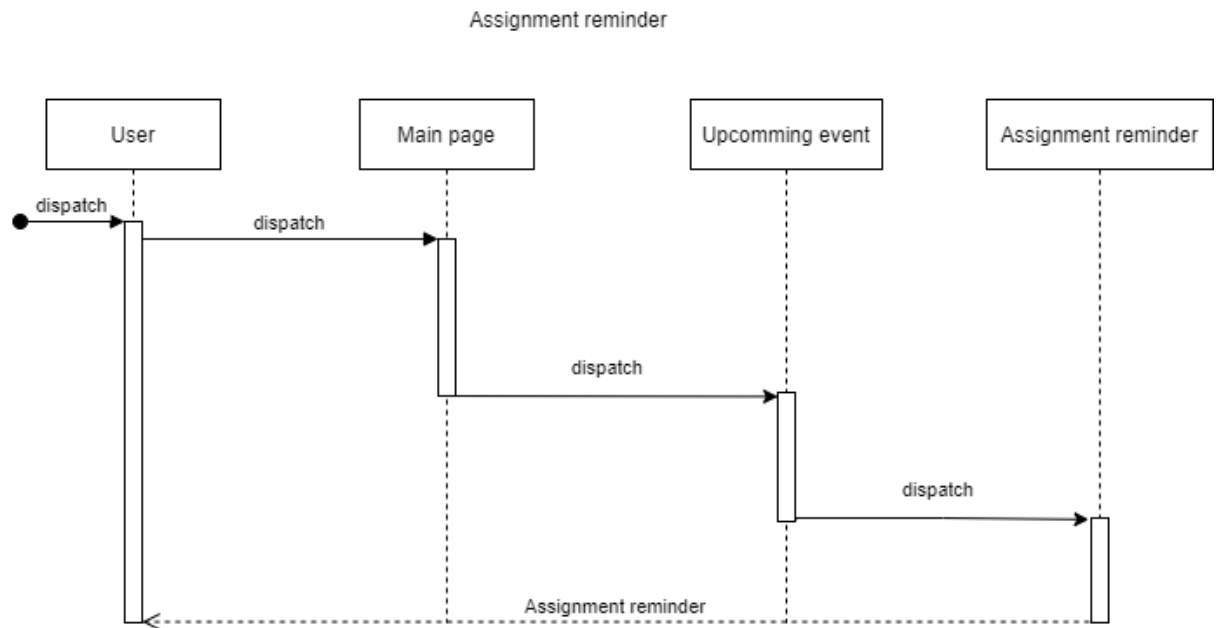
3.1.9 Assignment Reminder

For this use case the system will remind you for the assignment that has been assigned.

3.1.9.1 Class Identification

| No | Class Name | Detailed |
|----|---------------------|---------------------|
| 1. | User | User |
| 2. | Main page | Main page |
| 3. | Upcoming Event | Upcoming Event |
| 4. | Assignment reminder | Assignment reminder |

3.1.9.2 Sequence Diagram



3.1.9.3 Class Diagram

3.2 Design Detailed Classes

| No | Design Class | Name Related Analysis |
|----|---------------------|-----------------------|
| 1. | main | main |
| 2. | Login | Login |
| 3. | Create New Event | Create new Event |
| 4. | Event Information | Event Information |
| 5. | Upcoming Event | Upcoming Event |
| 6. | User Customization | User Customization |
| 7. | Assignment Reminder | Assignment Reminder |

3.2.1 Event Information

This section is filled with a list of operations and Create attributes for each class.

Name of Class : Main

| Operation Name | Visibility (private, public) | Description |
|---------------------------------|---------------------------------|-------------|
| Filled with operation signature | | |
| | | |
| | | |
| Attribute Name | Visibility (private, public) | Type |

| | | |
|----------------------------|--|--|
| Filled with attribute name | | Write the type according to what is known in the programming language used |
| | | |
| | | |

3.2.2 Class <class name>

3.3 Diagram Overall Class

This section is filled with the overall class diagram.

3.4 Algorithms/Query

This section is filled only for the algorithm framework for **methods of a class** that is considered quite important. Implementation of skeleton code can also be done for classes defined in certain programming languages. You can make sub-chapters per class.

Example:

Class :

Operation Name :

Algorithm : (Algo-xxx)

| |
|--|
| |
|--|

{If referring to a specific query, complete the query table below}

Query :

| No Query | Query | Description |
|----------|-------|--------------------------------------|
| Q-xxx | | Write down the function of the query |
| | | |
| | | |

3.5 Interface Design

This section is filled with the initial version of the interface prototype .

Next, for each interface/screen, write down the detailed specifications, for example as below:

Interface : Login Page

Gambar

| Id Objek | Type | Name | Description |
|----------|--------|------|---|
| Button1 | Button | OK | If clicked, User will be log in using gmail |
| Button2 | Button | OK | If clicked, User will be login using igracias |

Interface : Main Page

Gambar

| Id Objek | Type | Name | Description |
|-----------------|---------------|-------------|---|
| <i>Button3</i> | <i>Button</i> | <i>OK</i> | <i>If clicked, User will be directed to a assignment submission</i> |
| <i>Button2</i> | <i>Button</i> | <i>OK</i> | <i>If clicked, User can see other option on the side bar</i> |

Interface : Detail list pag

Gambar

| Id Objek | Type | Name | Description |
|-----------------|---------------|-------------|--|
| <i>Button1</i> | <i>Button</i> | <i>OK</i> | <i>If clicked, User will be log in using gmail</i> |
| <i>Button2</i> | <i>Button</i> | <i>OK</i> | <i>If clicked, User will be login using igracias</i> |

3.6 Design of Class Persistence Representation

*This section is filled with database schema design and its traceability to the entity class.
(RELATIONSHIP SCHEME DEVELOPMENT)*

4 Traceability Matrix

Mapping use cases with related classes

| Requirements | Related Usecases | Class |
|---------------------|-------------------------|--------------|
| FR-01 | | |
| FR-02 | | |
| | | |
| | | |
| | | |