
TimeDrop

TimeDrop
Use-Case Specifications

Version <1.1>

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| TimeDrop | Version: <1.0> |
| Use-Case Specifications | Date: <10/06/2022> |
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Revision History

| Date | Version | Description | Author |
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Use-Case Specifications

1. Use-Case Model

1.1 Introduction

This system provides the user with a calendar system where they can organize their tasks in multiple different manners. It lets the user login and update their calendar main page, containing the types of calendars and a combined to-do list. A user is able to access the system by entering a username and password that is previously stated by the user and stored in the management database, otherwise the user is prompted to create an account. The user then enters the system and all the information exchange in the system is linked with an external database/server.

1.2 General Actors Descriptions

1.2.1 User

An actor that utilizes the website services

1.2.2 Django Authentication API

A source to approve account sign-up or log-in

1.3 Use-Case Model Hierarchy

1.3.1 Website Connections

- **Description**

This package contains the Login/Logout/Sign-up system and the User Interface Interactions

- **Use Cases**

- Create Account
- Login
- Logout
- View Calendar Selection and Combined To-Do List
- Create Calendar
- View Specific Calendar's Monthly View and To-Do List
- Add Task Inside Calendar

- **Actors**

- User
- Database
- TimeDrop system

- **Relationships**

It contains the Login/Logout/Sign-up system and User Interface Interactions package

- **Packages Owned**

- Login/Logout/Sign-up System
- User Interface Interactions

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1.3.1.1 Packages Diagram

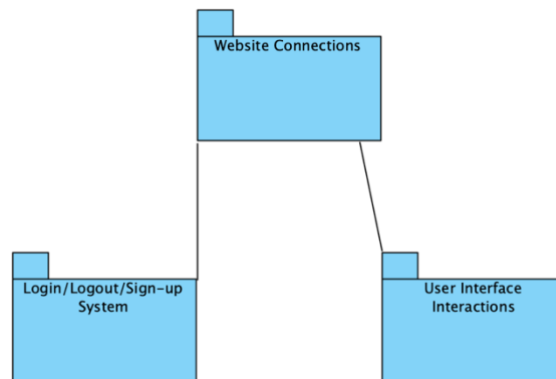


Figure 1: Website Connection Packages Diagram

1.3.1.2 Login/Logout/Sign-up System

- **Description**
Lets the user login, logout, and sign-up into their account
- **Use Cases**
 - Login
 - Logout
 - Create Account
- **Actors**
 - User
 - Database
 - TimeDrop System
 - Django Login API
- **Relationships**
Part of Website Connections
- **Packages Owned**
None

1.3.1.3 User Interface Interactions

- **Description**
Lets the user interact with the system and use the functionalities of the system
- **Use Cases**
 - View Calendar Selection and Combined To-Do List
 - Create Calendar
 - View Specific Calendar's Monthly View and To-Do List
 - Add Task Inside Calendar
- **Actors**
 - User
 - Database
 - TimeDrop System
- **Relationships**
Part of Website Connections
- **Packages Owned**
None

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1.4 Diagrams of the Use-Case Model

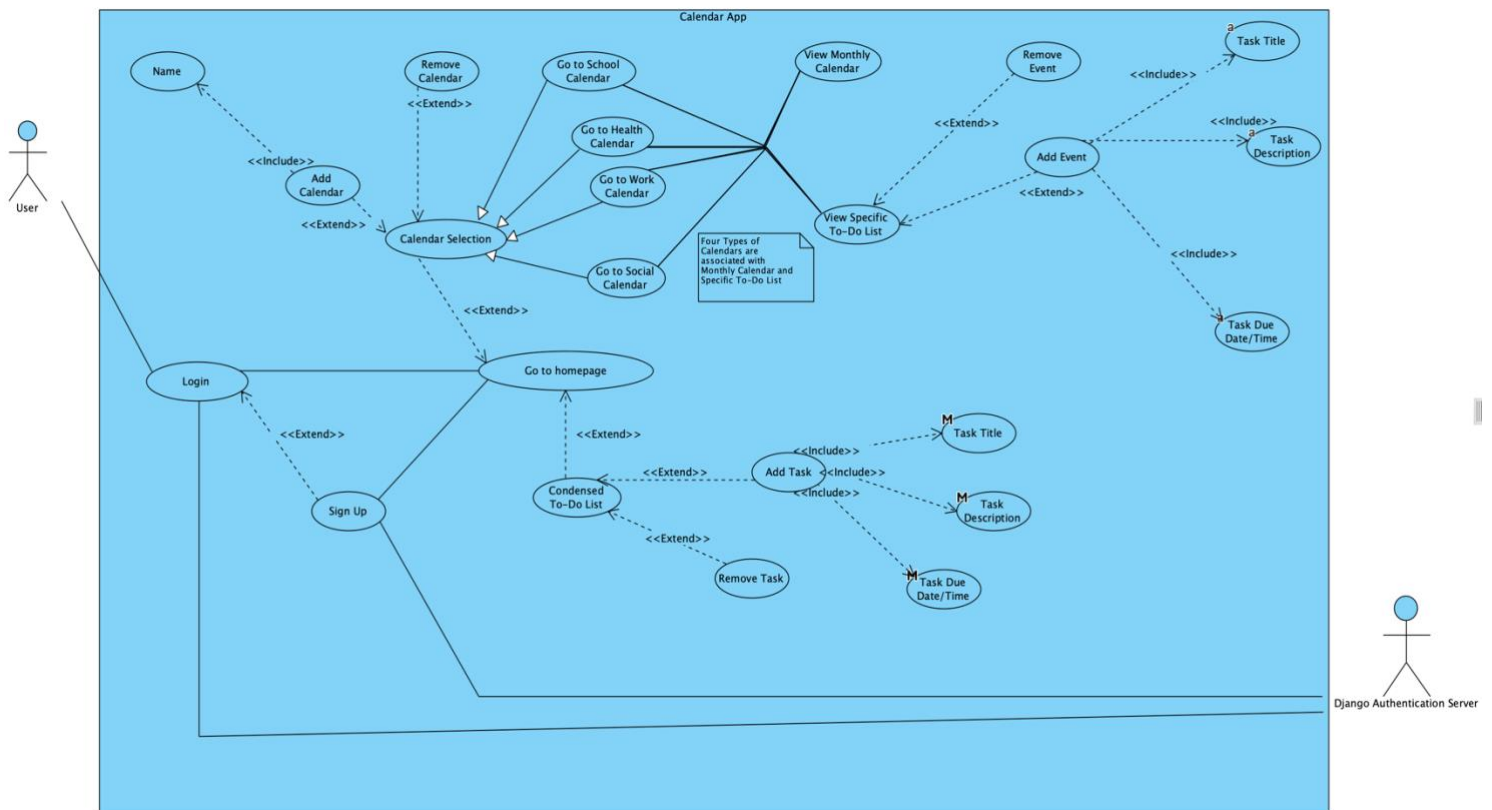


Figure 2: TimeDrop System Use-Case Diagram

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2. Create Account

2.1 Brief Description

The user creates their account and inputs their information so it can be personalized and stored.

2.2 Flow of Events

2.2.1 Basic Flow

The user loads the website and goes to the sign-up button. When clicked, the create account will prompt the user to input their email, First and Last name, username, and password.

2.2.2 Alternative Flows

None.

2.3 Special Requirements

< Having an Email >

The user must have an email to create an account.

2.4 Preconditions

< Internet Access >

The user needs to have access to the internet.

2.5 Postconditions

< Account Creation >

The user will now have an account that is personalized for them.

2.6 Extension Points

< Login - Extend >

The user can choose to either login or sign-up.

2.7 Relationships

The Sign-up use case is connected to the Go to Homepage.

2.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

2.9 Other Diagrams

None.

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3. Login

3.1 Brief Description

Allows users to access their accounts where their calendar information is stored. Users must enter their username and password to access their accounts and to use the website.

3.2 Flow of Events

3.2.1 Basic Flow

The user provides their username and password to the Login Interface to log into the application. The account is checked through a database and if the correct credentials are entered, the user is sent into the homepage of the application.

3.2.2 Alternative Flows

None.

3.3 Special Requirements

< Having Credentials >

Users must have already created an account and have a valid username and password.

3.4 Preconditions

< Pre-Existing Account >

The user must already have an existing account

< Logged Out >

The user isn't already logged in.

< Has Credentials >

The user must have a valid username and password.

3.5 Postconditions

< Account Validation >

The credentials are checked, and the user can access the application.

3.6 Extension Points

< Sign-up - Extend >

The user can choose to sign-up if they don't have an existing account.

3.7 Relationships

Login is connected to Go to Homepage and to the User

3.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

3.9 Other Diagrams

None.

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4. Logout

4.1 Brief Description

Allows the user to end their login session and logout of the website.

4.2 Flow of Events

4.2.1 Basic Flow

The user clicks on the logout button and the system sends them out of the system and back to the login page.

4.2.2 Alternative Flows

None.

4.3 Special Requirements

None.

4.4 Preconditions

< Logged In >

The user must already be logged in.

4.5 Postconditions

< System Logout>

The user is logged out of the system and is sent to the login page.

4.6 Extension Points

None.

4.7 Relationships

Logout is connected to the user.

4.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

4.9 Other Diagrams

None.

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5. View Calendar Selection and Combined To-Do List

5.1 Brief Description

Allows the user to go to the homepage and view the calendar selection and combined to-do list.

5.2 Flow of Events

5.2.1 Basic Flow

The user must first login and then they will be shown the homepage where they can view both the calendar selection and combined to-do list.

5.2.2 Alternative Flows

None.

5.3 Special Requirements

None.

5.4 Preconditions

< Having an Account >

The user needs to have an existing account in order to view these two features.

5.5 Postconditions

< Go to Homepage >

The user can view the two features using the homepage interface.

5.6 Extension Points

< Calendar Selection - Extends >

The user can choose to view the calendar selection.

< Combined To-Do List - Extends >

The user can choose to view the combined to-do list.

5.7 Relationships

The homepage containing these two features is connected to the login and sign-up.

5.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

5.9 Other Diagrams

None.

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6. Create Calendar

6.1 Brief Description

The user can create a new calendar of the types social, work, school, and/or health in the case they don't exist already.

6.2 Flow of Events

6.2.1 Basic Flow

The user first logs into their account and is shown the homepage. From the homepage, the user can choose to add a new calendar where they are then prompted to input a name for the calendar.

6.2.2 Alternative Flows

None.

6.3 Special Requirements

None.

6.4 Preconditions

< Having an Account >

The user must have an existing account to create a calendar.

<Logged in >

The user has to be logged in to create and store the calendar.

6.5 Postconditions

< New Calendar >

The user has a new calendar that is visible on their homepage.

6.6 Extension Points

< Enter Name - Include >

The user needs to enter a name for the calendar when it is created.

6.7 Relationships

The Create calendar node is connected to the application homepage.

6.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

6.9 Other Diagrams

None.

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7. View Specific Calendar's Monthly View and To-Do List

7.1 Brief Description

The user can see the monthly view and to-do list for a specific calendar by going into an existing calendar

7.2 Flow of Events

7.2.1 Basic Flow

The user must first be in the homepage of the application by logging in and then select an existing calendar to enter and these two features will be displayed.

7.2.2 Alternative Flows

None.

7.3 Special Requirements

None.

7.4 Preconditions

< Having an Account >

The user must have an existing account in order to use these features.

< Existing Calendar >

The user must enter into an existing calendar to view these three features.

7.5 Postconditions

< System Display >

The system will display these three features to the user.

7.6 Extension Points

< Add Task - Extend >

The user can choose to add a task to any of these three features.

< Remove Task - Extend >

The user can choose to remove a task from many of these three features.

7.7 Relationships

The viewing of these two features is connected to their specific calendar type.

7.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

7.9 Other Diagrams

None.

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8. Add Task Inside Calendar

8.1 Brief Description

The user can go into a calendar and add a task inside.

8.2 Flow of Events

8.2.1 Basic Flow

The user is in the homepage by logging into their account and they choose a type of calendar to enter. Upon doing so, the user is displayed with the monthly view and a to-do list and the user can add a task.

8.2.2 Alternative Flows

None.

8.3 Special Requirements

None.

8.4 Preconditions

< Having an Account >

The user must have an existing account in order to access this feature.

< Existing Calendar >

The user must have created a calendar to add a task to it.

8.5 Postconditions

< Task Added >

The system displays the task at the selected date and time.

8.6 Extension Points

< Task Title - Include >

The user must enter a name for the task.

< Task Description - Include >

The user must enter a priority for the task.

<Task Due Date/Time - Include >

The user must enter a date and time for the task.

8.7 Relationships

The Add task in the calendar is connected to either the monthly view or to-do list in the calendar.

8.8 Use-Case Diagrams

Refer to Use-Case Diagram (Figure 2)

8.9 Other Diagrams

None.