**2.3.Data flow Diagram**

The data flow diagram could likely to divided as Use Case Glossary,application and Narrative respectively.In fact,the Use case Glossry ‘s usage mainly refers for the action and use case brief description,while Narrative is refer for the Use Case Model and detalized information for each activity.

**2.3.1. Use Case Glossary**

The Use case glossary have summarized as different activities for different users usage,for the further usage diagram ‘s basic background and introduction.

|  |  |  |
| --- | --- | --- |
| **Use-Case Glossary** | | |
| **Use-Case Name** | **Use-Case Description** | **Participating**  **Actors and Roles** |
| **Create account** | **This use case describes the event of creating a new account.** | **Client** |
| **Enter account** | **This use case describes the event of a client entering their account and password.** | **Client** |
| **Enter event** | **This use case describes the event of a client add new event into their calendar** | **Client** |
| **Check event** | **This use case describes the event of a client checking in their calendar** | **Client** |
| **Text to speech** | **This use case describes the event of automatically generate a speech from text.** | **Time** |
| **Speech to text** | **This use case describes the event of automatically transferring speech to text** | **Time** |
| **Edit event** | **This use case describes the event of editing event in the calendar** | **Client** |
| **Logout** | **This use case describes the event of logout user’s account** | **Client** |

**2.3.2. Data Flow Diagram**

**2.3.2.1. Terminology of data flow diagram:**

Term1 : Use case – a subset of the overall system functionality

Represented by a horizontal ellipse with name of use case inside the ellipse

Term 2 : Actor – anyone or anything that needs to interact with the system to exchange information human, organization, another information system, external device, time, etc…



**2.3.2.2.Actor Symbol**

Term 3 : Association - a relationship between an actor and a use case in which an interaction occurs between them

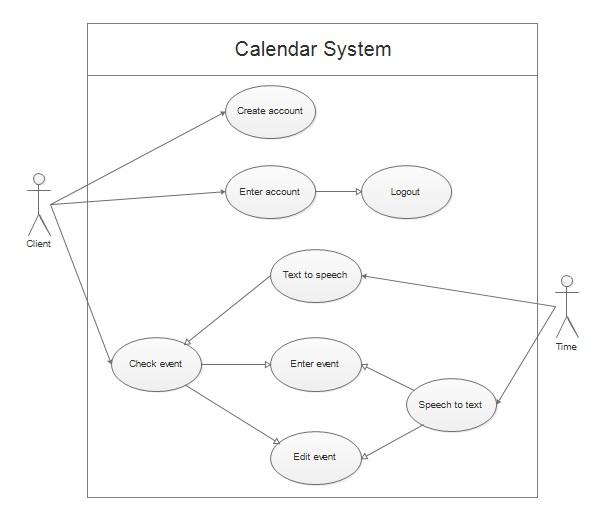
****

**2.3.2.2.Association Diagram Symbol**

**2.3.2.2.Use Case Diagram**

The Use case diagram clearly illustrated the process of interchange between calendar server and users ‘s flow and activities respectively.

**Use-Case Model Diagram**



Use-Case Narrative

Calendar System

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Create account | | Use case type  Business Requirement |
| Use-Case ID: | FYP-001 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a new client register to the system | | |
| Precondition: | Nope | | |
| Trigger: | The use case is initiated when the user selects this option from the user interface | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when the user’s click  Step 3: The user input he’s email to account field  Step 5: The user inputs he’s password  Step 7: The user inputs he’s password in password confirm field  Step 9: The user clicks Register button | Step 2: The system responds by displaying register page  Step 4: The system check the account input is valid (an email) or not and responds by displaying a tick  Step 6: The system check the password input is valid (long than 8 length) or not and responds by displaying a tick and password confirm field can be inputted  Step 8: The system check the password and password confirm is same or not, if same responds by displaying a tick  Step 10: The system stores those data into database and responds by displaying login page | |
| Alternate Courses: | Alt Step 4a, 6a, 8a: If the user input invalidly, the system will responds with a cross.  Alt Step 3a, 5a, 7a: If the user do not input all the field, the system will responds by displaying a pop-up message to hints user. | | |
| Conclusion: | This use case concludes when the system saved the registration information | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s input can be stored | | |
| Assumptions: | Nope | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Enter account | | Use case type  Business Requirement |
| Use-Case ID: | FYP-002 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client log-on to the system with their account | | |
| Precondition: | The user must have their own account | | |
| Trigger: | The use case is initiated when the user wants to use the system | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when user go to the web page  Step 3: The user input he’s account and password | Step 2: The system responds by displaying the login page  Step 4: The system check the inputted account and password check whether the account is existed or not and responds by displaying index page | |
| Alternate Courses: | Alt Step 4a: If the input is invalid, the system will responds by displaying error message. | | |
| Conclusion: | This use case concludes when the user login success | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s input can be stored | | |
| Assumptions: | User registered an account | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Check event | | Use case type  Business Requirement |
| Use-Case ID: | FYP-003 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client view events in their calendar | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client | | |
| Trigger: | The use case is initiated when the user login to the system | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when the user login | Step 2: The system responds by displaying calendar page and event | |
| Alternate Courses: | Step 3: The user can choose display method (by day or by month) | | |
| Conclusion: | This use case concludes when the system loaded and displayed event information | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s event can be displayed | | |
| Assumptions: | User registered an account | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Text to speech | | Use case type  Business Requirement |
| Use-Case ID: | FYP-004 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of system play voice to client | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client and user must open the check events interface | | |
| Trigger: | The use case is initiated when the user login | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when use login | Step 2: The system get event information from database and transfer it to voice and responds by playing the voice to user | |
| Alternate Courses: |  | | |
| Conclusion: | This use case concludes when the system play the voice document | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s event information can be accessed | | |
| Assumptions: | User registered an account, User’s device has speaker | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Enter event | | Use case type  Business Requirement |
| Use-Case ID: | FYP-005 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client add new event into their calendar | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client and user must open the check events interface | | |
| Trigger: | The use case is initiated when the user selects this option from the user interface | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when the user click  Step 3: The user may choose the edit detail option  Step 5: The user inputs all the event information and click the save button. | Step 2: The system responds by displaying a dialog box with title input, save and edit detail.  Step 4: The system responds by displaying a pop-up window with event detail, save and cancel button.  Step 6: The system saves those information and pop up a success message | |
| Alternate Courses: | Alt Step 3a: If the user click the save button, the system will saves the title and other ‘detail’ information that by system default. | | |
| Conclusion: | This use case concludes when the system saved the event information | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s input can be stored | | |
| Assumptions: | User registered an account | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Edit event | | Use case type  Business Requirement |
| Use-Case ID: | FYP-006 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client edit existing event in their calendar | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client, user must open check events interface | | |
| Trigger: | The use case is initiated when the user selects this option from the user interface | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when this user click  Step 3: The user may edit the detail and click Save button | Step 2: The system responds by displaying pop-up window with event detail  Step 4: The system save the details and responds by displaying a success message | |
| Alternate Courses: | Alt Step 3a: If the user click the close button, the system do nothing.  Alt Step 3b: If the user click the delete button, the system will display a confirm message, if user click OK button, the event will be deleted. | | |
| Conclusion: | This use case concludes when the system saved the event information | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s input can be stored | | |
| Assumptions: | User registered an account, User has inputted event | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Speech to text | | Use case type  Business Requirement |
| Use-Case ID: | FYP-007 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client speak out words to input data | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client | | |
| Trigger: | The use case is initiated when the user login | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when user login  Step 2: User can speak command to interact with the system | Step 3: The system transfer those voice input the text and responds by executing requested action or input | |
| Alternate Courses: |  | | |
| Conclusion: | This use case concludes when the system responds those commands | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming and Database to be used so clients can use it easily, and client’s input can be stored | | |
| Assumptions: | User registered an account and User has voice input device connected | | |
| Open Issues: | Nope | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use-Case Name: | Logout | | Use case type  Business Requirement |
| Use-Case ID: | FYP-008 | |
| Priority: | High | |
| Source: |  | |
| Primary System Actor: | Client | | |
| Primary Business Actor: | Client | | |
| Other participating Actors: |  | | |
| Other Interested Stakeholders: |  | | |
| Description: | This use case describes the event of a client to log off their account | | |
| Precondition: | The user must have previously logged on so that system can identify the user as a particular client | | |
| Trigger: | The use case is initiated when the user selects this option from the user interface | | |
| Typical Course of Events: | Actor Action | System Response | |
| Step 1: This use case is initiated when this user click | Step 2: The system responds by displaying a login interface | |
| Alternate Courses: |  | | |
| Conclusion: | This use case concludes when the system display login page | | |
| Postcondition: | Nope | | |
| Business Rules: | Nope | | |
| Implementation Constraints and Specifications: | Web programming to be used so clients can use it easily | | |
| Assumptions: | User registered an account | | |
| Open Issues: | Nope | | |