Use Cases and Logical Architecture

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* Project Title: Dublin Bus Timetable Website

**Provide at least 6 Use-cases describing the functionality of the proposed system**

## Section 1: For Each Use Case:

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| Title (goal) | Create an Account |
| Primary Actor | Unregistered Users |
| Story | User will click on register on the navbar, be redirected to a sign up page prompting to add the required details, afterwards will be then redirected and logged in. |

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| Title (goal) | Sign in |
| Primary Actor | Registered Users |
| Story | User will click on login on the navbar, be redirected to a log in page prompting to add their username and password, once provided their correct details, they will then be redirected onto the homepage with their account signed in. |

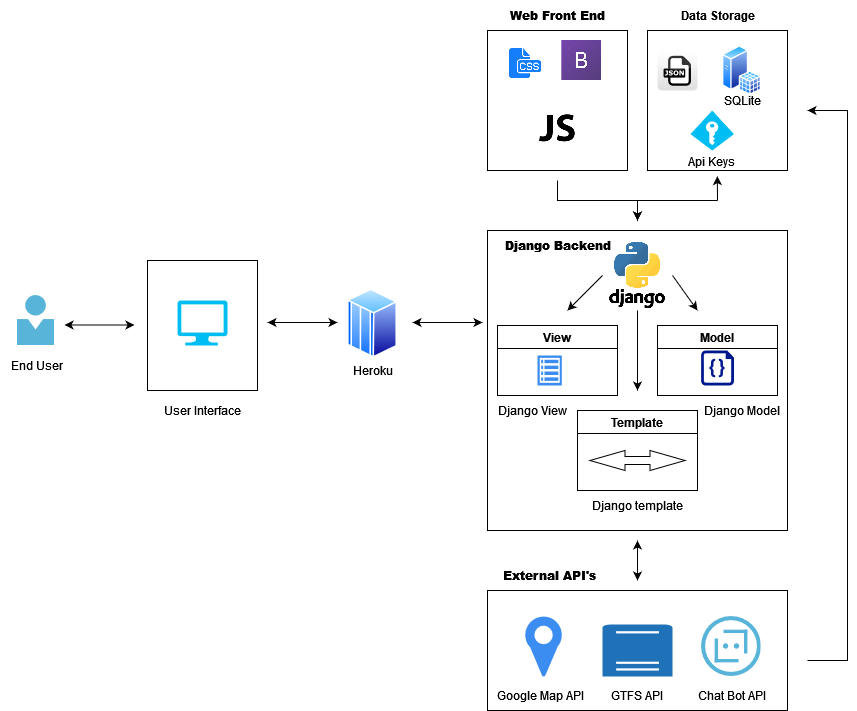
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| --- | --- |
| Title (goal) | Forgot Password |
| Primary Actor | Registered Users |
| Story | User on the login page will click on forgot password and will be redirected onto a forgot password page, prompting them to add their email that they have used to create the account. They will then be sent an email with a unique link to change their password. |

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| Title (goal) | Search Timetables |
| Primary Actor | Registered / Unregistered Users |
| Story | User will click on the ‘Timetables search’ for the bus that they are looking for. Once found, they will be redirected to a page listing the timetable for the bus they are looking for. |

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| Title (goal) | Chatbot FAQ |
| Primary Actor | Registered Users |
| Story | The user will click on the chatbot box, and they will be prompted to select a question, and the bot will then try respond accordingly to the question they have selected. |

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| Title (goal) | Search RealTime |
| Primary Actor | Registered / Unregistered Users |
| Story | User will click on the ‘RealTime search’ for the bus that they are looking for. Once found, they will be redirected to a page listing the RealTime Times for the bus are searching. |

## Section 2: Logical Architecture



**Discuss each component of your architecture**

Heroku will be used to host the Django Website. Django will be used for the backend, creating the views, models, and templates for the project The External Api’s, google maps, gtfs-r, chat-bot will be used for the project, google maps displaying the location of stops, gtfs-r to display bus information, and chat bot for FAQ. Data will be stored in an SQLite Database and Json files. The Front end of the project will use html, bootstrap and JavaScript for the user interface and design.

**Add numbers to the arrows and discuss the flow of data**

1(User) will go onto 2(UI) which is hosted on 3(Heroku) and will POST/REQUEST from 4(DjangoBackend) to get the data needed. 4(DjangoBackend) will grab information from 5(external apis) and then will be saved onto 6(data storage) which 4(DjangoBackend) will be using to get the API information. 7(front end) will then display the interface of 4(DjangoBackend) to the 1(User).