Use Cases and Logical Architecture

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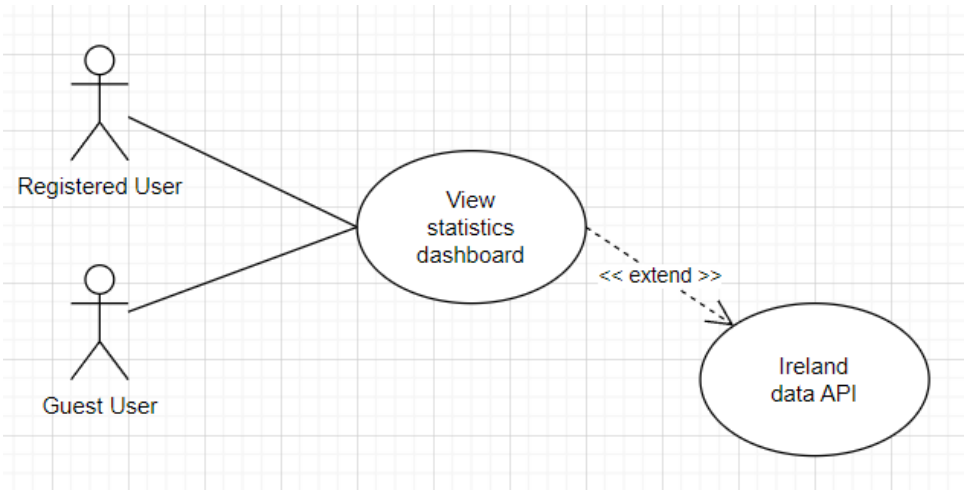
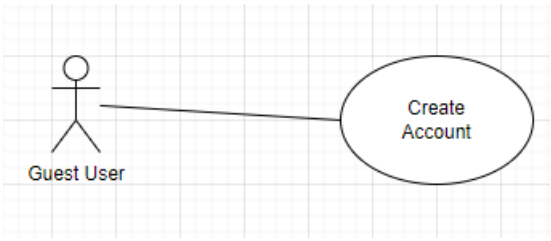
- Project Title: Household Budgeting Web App

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

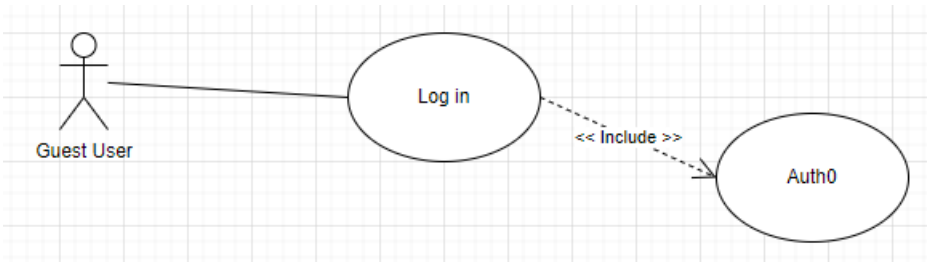
Section 1: For Each Use Case:

Title (goal)	View statistics dashboard
Primary Actor	Guest User, Registered User
Story	All users (guest and registered) can view the dashboard that displays the statistics for average income in Ireland, and average household weekly spending. This data is retrieved from the API and displayed in the UI.
	

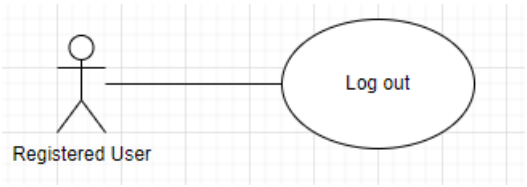
Title (goal)	Create an account
Primary Actor	Guest User
Story	A guest user can create an account on the budgeting web app to save their budgets.



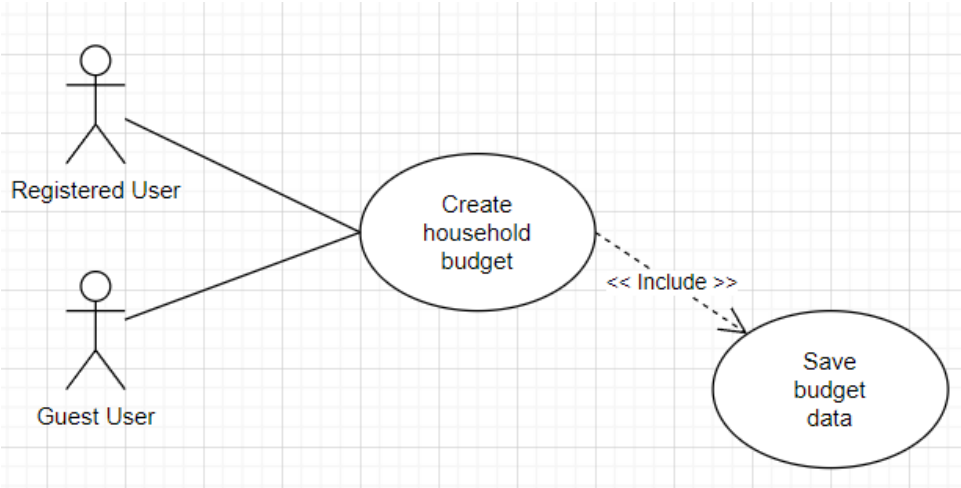
Title (goal)	Log in
Primary Actor	Guest User
Story	A guest user logs in to their account if they have one. Their identity will be validated using Auth0.

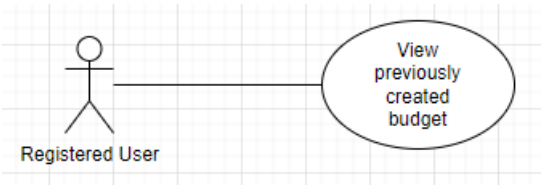


Title (goal)	Log Out
Primary Actor	Registered User
Story	A registered user (user that's logged in) can log out.

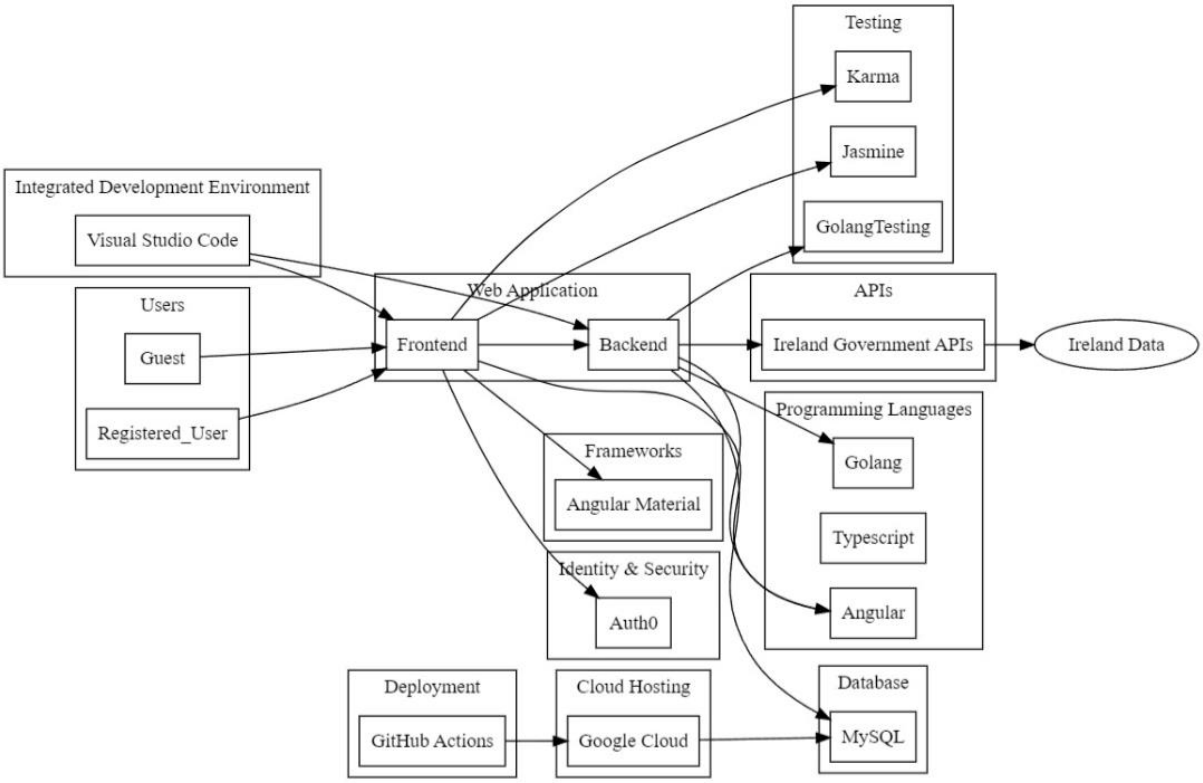


Title (goal)	Create household budget
Primary Actor	Registered User, guest user
Story	Any user can create a household budget. The user will enter their financial income and expenses and at the end will be able to view a breakdown of their spending. Spending will be categorized into key areas, including Household bills, Living costs, Finance & Insurance, Family & Friends, Travel, and Leisure. If the user is logged in, their budget data can be saved in the database and retrieved later.



Title (goal)	View household budget
Primary Actor	Registered User
Story	A registered user (logged in) can view their previously created household budgets. This data will be retrieved from the database.
	

Section 2: Logical Architecture



Logical Architecture Discussion

Visual Studio code will be used to write the code for both the backend and the frontend of this application. Angular material will be used to create the frontend UI and Auth0 will be used to verify users on the system. This application will be tested using Jasmine and Karma for the frontend. Jasmine is a testing framework for Angular and Karma is the test runner. Golang has a testing package that can be used to test the backend functionality. The backend will make http calls to the API hosted by the Central Statistics Office to request the data to display to the user on the dashboard.
This project will use GitHub Actions to automate building and testing. Project will be hosted on Google cloud.