

PROJECT ASSIGNMENT – GROUP 2 (IST)

“BUDGET BUDDY” – HOLIDAY PLANNING MADE EASY

What Are We Building?

We're creating an innovative travel and budgeting website to help travellers plan their trips more efficiently and economically, including a feature that automatically calculates and distributes shared expenses among travel group members. Our platform combines comprehensive trip planning tools with excellent usability, allowing users to explore new destinations without worrying about budgeting group expenses.

*“Stay Organised,
Stay Relaxed,
Stay Friends.”*



- 1.** Input your travel costs online.
- 2.** We take care of the group budgeting.
- 3.** Tell us when you've made payments.
- 4.** We'll notify you when you and your group reach payment milestones.

The Problem

When planning group holidays, keeping on top of all the costs can become very confusing. Moreover, this responsibility often falls onto one individual. This can put a strain on even the closest of friendships.

What Does our Website Solve?

Our travel and budgeting website provides a comprehensive range of tools and features to streamline the vacation planning and budgeting process. Members have easy access to total and divided costs and contributions, which alleviates some of the stress of holiday planning as a group.

Budget Management

- Records and categorises travel inputted travel expenses.
- Assists users in calculating their share of the travel expenses.
- Records self-declared contributions to the travel costs.
- Calculates real-time remaining costs.

Social Features

- Enables collaborative trip planning for groups, making it simple for them to plan together.
- Allows users to track multiple holiday budgets connected to their individual login.

NB: PLEASE REFERENCE SAMPLE ARCHITECTURE DIAGRAM TO VISUALISE THE CODE DESIGN IMPLEMENTATION.

Here is a breakdown on how we have designed this website and how we intend to implement code to achieve it

1. The Database (SQL)
2. The Backend (Python)
3. The Frontend (HTML)



Meet the Team

We're approaching the work very collaboratively. We meet up weekly on video call and keep up to date in between through the slack channel, our Trello board, and GitHub. Each week we assign objectives to meet in the week and create an agenda for the following meeting. The minutes are taken from each meeting, so we have a clear audit of our workflow. We are all keen to be involved with each step of the process, but following individual SWOT analyses, we have assigned a group 'leader' to oversee the implementation of each part of the project.



Chahat – SQL 'Lead'



Clarisse – Python 'Lead'



Jessie – HTML 'Lead'

The Database

This will store the actual data inputted by the users. We have normalised this database into four tables:

- Dashboard (parent) table, includes holiday reference, group members, total costs, total contributions, departure date.
- Person details, includes contact details and holiday reference keys.
- Costs table, includes totalled and individual cost breakdowns.
- Contributions table: individual contributions per group member.

The Backend

This will provide the logic which connects the website to the database. In python, we will utilise the following functionality:

- API creation and handling, this involves: Flask to create APIs to allow the frontend and backend to interact.
- Website logic implementation, we will: write the logic which enables the website to process prompts, perform SQL queries, and update the SQL database.
- Test the logic and make sure that it correctly handles user inputs and logic implementation.

The Frontend

In PyCharm, we will leverage HTML templates to enable customisation of the website presentation.

- Design the user interface. This will include a homepage, options to view a particular holiday, a cost summary page, and a contributions summary page.
- Form handling (such as user log in and different inputs).