DATABASE TABLE DESIGN

Authentication

Member_id FK (Member_Details)

Username PK

Password VARCHAR(20) NOT NULL

Check (length(Password) >=10

Trips

Trip ID (INT) AUTO INCREMENT PK

Trip Name VARCHAR(50) NOT NULL

Start Date DATE

Group size (INT) NOT NULL

Member_Details

Member_id (INT) AUTO_INCREMENT PK

Member name VARCHAR(50) NOT NULL

Email VARCHAR(50) NOT NULL

Costs

Trip_id FK (Trips)

Flights_total FLOAT(10) DEFAULT 0 NOT NULL

Accomodation_total FLOAT(10) DEFAULT 0 NOT NULL

Transfers total FLOAT(10) DEFAULT 0 NOT NULL

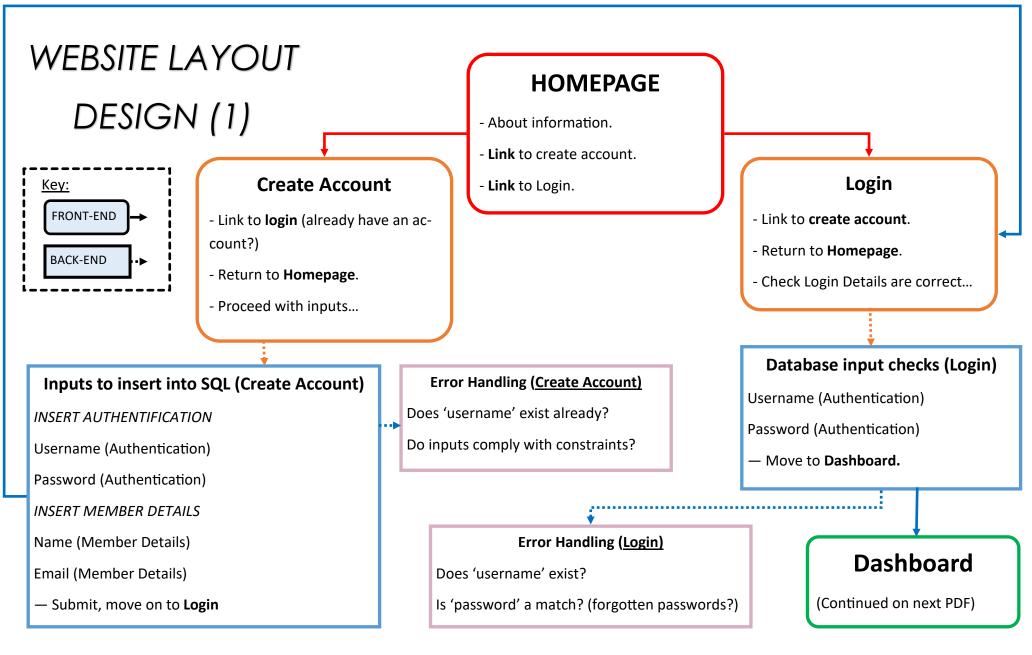
Activities_total FLOAT(10) DEFAULT 0 NOT NULL

Contributions

Trip_id FK (Trips)

Member_id FK (Member_Details)

Total FLOAT(10) DEFAULT 0 NOT NULL



Example 1: www.budgetbuddy.com/home/create_account/

Example 2: www.budgetbuddy.com/home/login

Example 3: www.budgetbuddy.com/<user>/dashboard

WEBSITE LAYOUT DESIGN (2)

DASHBOARD

- Log out (Return to Homepage).
- Overview of trips (can be clicked into).
- Imbed link to each 'trip_name'
- Option to add new trip.

Add New Trip

- Option to return to **Dashboard.**
- Proceed with inputs...

Key: FRONT-END → BACK-END

Database Queries (Dashboard)

'Trip name' / 'member id' (Trip/member details join)

'Start_date' (Trips)

(repeat per trip attached to member id)

Submit — Move to 'Trip Name'

'Trip_Name'

(Continued on next PDF)

Inputs to insert to SQL (Add New Trip)

INSERT TRIPS

Trip name* (Trips)

Start Date* (Trips)

Group Size* (Trips)

INSERT COSTS

Flights Total (Costs)

Accommodation Total (Costs)

Transfers Total (Costs)

Activities Total (Costs)

Miscellaneous Total (Costs)

INSERT CONTRIBUTIONS

Total Contributions (Contributions default 0)

Submit — Move to **Dashboard**

Error Handling (Add New Trip)

Ensure all the values are inputted within their correct constraints (Value errors etc).

Behind the scenes (Add New Trip)

Ensure the Trips table has values inserted first, then take foreign key trip_id to add to the insert of the costs. Same for Contributions table (no user input though)).

Example 1: www.budgetbuddy.com/<user>/dashboard

Example 2: www.budgetbuddy.com/<user>/dashboard/<trip_name>

Example 3: www.budgetbuddy.com/<user>/dashboard/ <add new trip>

WEBSITE LAYOUT DESIGN (3)

'Trip_Name'

- Option to return to Dashboard.
- Countdown to trip.
- Total Cost.
- Costs Breakdown.
- Total Contributions.
- Contributions Breakdown.
- Imbed link to Add Contribution.

Database Queries ('Trip_Name')

Start Date (Trips) Countdown

Sum all Costs (Costs)

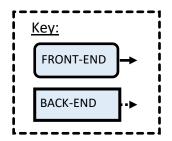
Individual Cost (Sum costs/group size (Trips and Costs join))

Sum Contributions (Contributions, Group By trip_id)

Individual Contribution (Contribution, member id)

Group remaining contributions (sum costs—sum contributions)

Individual remaining contributions (individual cost—contribution)



Add Contribution

- Option to return to Dashboard.
- Proceed with inputs...

Inputs to insert into SQL

(Add Contributions)

UPDATE CONTRIBUTIONS

Set Total = Total + user input

Submit — Move to 'Trip_Name'

Behind the scenes (Add Contribution)

Ensure the member_id id and trip_id are added coorectly (WHERE member_id = X and trip_id = Y)

Error Handling (Add Contribution)

Ensure all the values are inputted within their correct constraints (Value errors).

Example 1: www.budgetbuddy.com/<user>/dashboard /<trip name>

Example 2: www.budgetbuddy.com/<user>/dashboard/<trip_name>/add_contribution