

## Personal Budget tracker

### ENSE 375 Project

#### State transition Testing

To perform State transition testing we'll need to identify the test requirements to cover all required test's, identify the required states and test cases and then create a state transition table to execute these tests.

##### **State Definition:**

- S1: Idle
- S2: Add entry prompt
- S3: Entry added
- S4: invalid entry input
- S5: delete entry prompt
- S6: entry deleted
- S7: invalid entry deletion
- S8: view entries

##### **Test cases (TC):**

1. TC1
  - a. Initial: S1
  - b. Action: select addEntry
  - c. Next state: S2
2. TC2
  - a. Initial: S2
  - b. Action: submit validEntry
  - c. Next state: S3
3. TC3
  - a. Initial: S2
  - b. Action: submit invalidEntry
  - c. Next state: S4
4. TC4
  - a. Initial: S4
  - b. Action: return to menu
  - c. Next state: S1
5. TC5
  - a. Initial: S2
  - b. Action: return to menu
  - c. Next state: S1
6. TC6

- a. Initial: S3
  - b. Action: return to menu
  - c. Next state: S1
- 7. TC7
  - a. Initial: S1
  - b. Action: select deleteEntry
  - c. Next state: S5
- 8. TC8
  - a. Initial: S5
  - b. Action: submit validDelete
  - c. Next state: S6
- 9. TC9
  - a. Initial: S5
  - b. Action: submit invalidDelete
  - c. Next state: S7
- 10. TC10
  - a. Initial: S6
  - b. Action: return to menu
  - c. Next state: S1
- 11. TC11
  - a. Initial: S8
  - b. Action: view entries
  - c. Next state: S1

#### State Transition table

State	Event/Trigger	Next State	Action/output
S1	Select addEntry	S2	Prompt user for type category etc.
S2	Submit valid entry	S3	Show entry added
S2	Submit invalid entry	S4	Show invalid entry
S4	Return to main menu	S1	Return to menu
S1	Select delete entry	S5	Prompt for type and ID
S5	Submit valid delete	S6	Show entry deleted
S5	Submit invalid delete	S7	Show invalid entry
S6 & 7	Return to main menu	S1	Show main menu
S1	Select viewEntries	S8	Display all entries
S8	Return to menu	S1	Show main menu