TripTypeDB

GetTripTypes(): List<TripTypes>

TripType

TripTypeShort: string
TripTypeName: string

-memberName

Trip

TripDate: DateTime
TripName: string
TripType: string

GetDetails(): Virtual

TripGrocery

ShopName: string

GetDetails(): base override

TripHardware

StoreName: string

GetDetails(): base override

TripCinema

CinemaName: string

GetDetails(): base override

Item

ItemName: string
Cost: decimal
Quantity: int

ItemSummary(): string

LineItemCreate

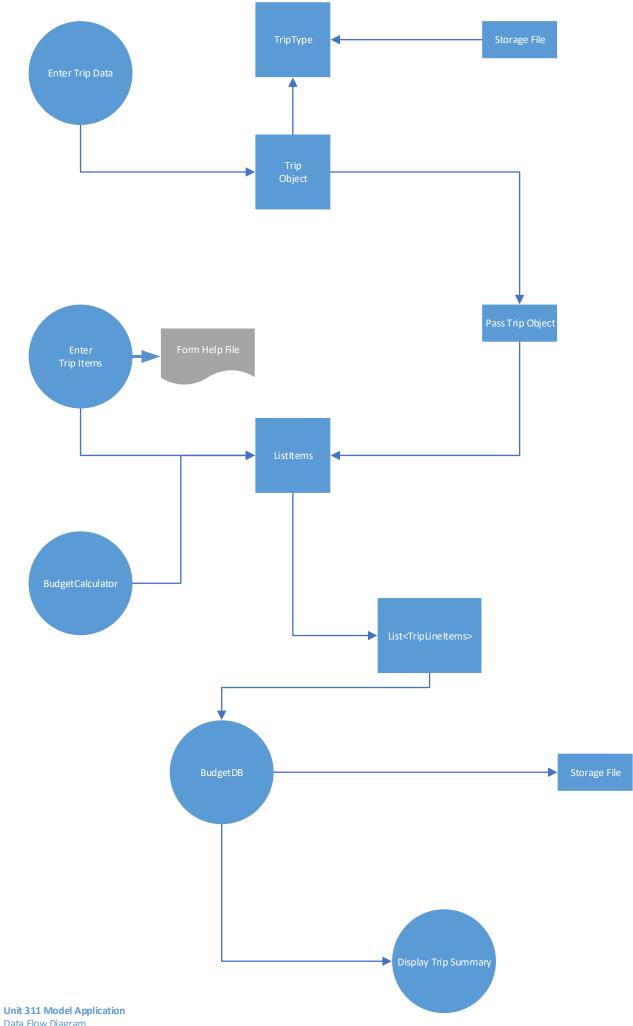CreateTripLineItem(Trip,Item): string

BudgetCalculator

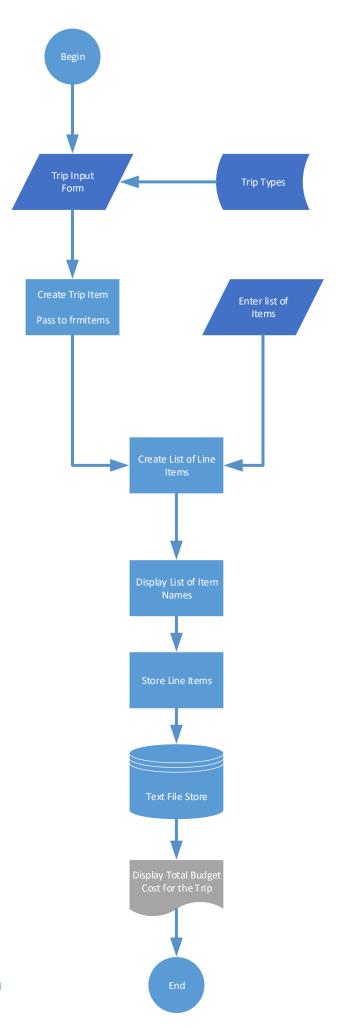CalculateItemTotal(): decimal
CalculateListTotal(): decimal

BudgetDB

StoreItemList(): int
GetAllStoredItems(): int
GetItemsByTripDate(): int

Unit 311 Model Application
Class Specification

```
                                        TripType  ◄──────────────  Storage File

  ┌─────────────┐
  │ Enter Trip  │
  │    Data     │
  └──────┬──────┘
         │                         ▲
         │                         │
         └──────────────►  Trip
                          Object ──────────────────┐
                                                    │
                                                    ▼
                                              Pass Trip Object

  ┌─────────────┐
  │   Enter     │──────►  Form Help File
  │ Trip Items  │
  └──────┬──────┘
         │
         │                 ListItems  ◄─────────────┘
         └──────────────►
  ┌─────────────┐              │
  │   Budget    │──────────────┘
  │  Calculator │              │
  └─────────────┘              ▼
                          List<TripLineItems>
                                    │
                                    ▼
                         BudgetDB  ──────────────►  Storage File
                              │
                              ▼
                         Display Trip Summary
```

Unit 311 Model Application
Data Flow Diagram

Enter Trip Data

TripType

Storage File

Trip Object

Pass Trip Object

Enter Trip Items

Form Help File

ListItems

BudgetCalculator

List<TripLineItems>

BudgetDB

Storage File

Display Trip Summary

Begin

Trip Input Form ← Trip Types

Create Trip Item
Pass to frmItems

Enter list of Items

Create List of Line Items

Display List of Item Names

Store Line Items

Text File Store

Display Total Budget Cost for the Trip

End

Unit 311 Model Application
Processes Flowchart