Class Diagram

QMainWindow

QObject

class **trip** : public QObject

+ trip() : explicit constructor
+ addtototalDistance(float totalDistance) : void
+ gettotalDistance() : float
+ void setfirstcollege(QString first) :
+ QString getfirstcollege() :
+ QString getlastcollege() :
+ void setlastcollege(QString last) :

- firstCollege : QString
- lastCollege : QString
- listofSouvenirstrip : QList<Souvenir*>
- m_totalDistance : float

class **MainWindow** : public QMainWindow

+ MainWindow() : constructor
+ ~MainWindow() : destructor
+ changeToAdmin() : void
+ changetoStudent() : void
+ keyPressEvent(QKeyEvent* pe) : void
+ additemstocombobox() : void
+ additemstocomboboxcheck(QString item) : void

- *m_controller : Controller
- page = 0 : int

class **Souvenir** : public QObject

+ Souvenir() : explicit constructor
+ item() const : QString
+ setItem(const QString &item) : void
+ price() const : QString
+ setPrice(QString price) : void
+ college() const : QString
+ setcollege(QString college) : void

- m_item : QString
- m_price : QString
- m_college : QString

class **Controller** : public QObject

+ Controller() : explicit constructor
+ ~Controller() : destructor
+ createTable(): void
+ createSouvenir(QString, QString, QString): void
+ createCollege(QString,QString, QString): void
+ deleteSouvenir(QString): void
+ updateSouvenir(QString, QString, QString): void
+ shortestTrip(QString, int): QList<Souvenir*>
+ getsaddlebackCollegeQueryModel(): QSqlQueryModel*
+ getSouvenirQueryModel(QString): QSqlQueryModel*
+ getCollegeQueryModel(): QSqlQueryModel*
+ getCollegeQuerystartonlyModel(): QSqlQueryModel*
+ readcollegeFile(): bool
+ readsouvenirFile(): bool
+ loadColleges(): void
+ loadSouvenirs(): void
+ customTrip(QString, QList<QString>): QList<Souvenir*>

+ listOfColleges : QList<College*>
- m_database : QSqlDatabase
- listofSouvenirs : QList<Souvenir*>
- completedTrips : QList<trip*>

class **College** : public QObject

+ College() : explicit constructor
+ startcollegeName() : QString
+ setstartCollegeName(QString) : void
+ distance() : QString
+ setDistance(QString) : void
+ endcollegeName() : QString
+ setendCollegeName(QString) : void

- startCollegeName : QString
- Distance : QString
- endCollegeName : QString

Incorrect Admin Login

Admin Login

Correct Admin Login

Logout

Click College Section

Click Souvenirs Section

College Section

Souvenirs Section

View all Colleges

View Colleges from Saddleback

Click Back

Select a College

View a College's Souvenir(s)

Load Colleges

No Souvenir is selected

Gets the text file location

Click cancel

Click Back

A Souvenir is selected

Successful read

Adds in the colleges from the text file

Add Souvenir

Add

Delete

Delete Souvenir

Edit

Edit Souvenir Price

Trip Planner Program

View List of Colleges

View List of Souvenirs

Plan Trips

Student

Admin

Trip Planner Page

Customer

Student Login

Plan a custom college trip

Plan shortest college trip

Buy souvnirs

Admin Page

- Admin Login
- Add college
- Delete college
- Edit college
- Add souvenirs
- Edit souvenirs prices
- Delete souvenirs

Admin

End Node goes to
the Login Page

Successfully
Login as Admin

Admin Page

Logout

Click
College
Section

Back

College Section
Page

View distance from
saddleback

View all colleges

Load College

File is open

File Directory for a
college text file

Add Souvenir

Edit Souvenir

Delete Souvenir

Back

Souvenir Section
Page

Click
Souvenir
Section

End Node goes to
the Login Page

Student Page

Logout

Custom Trip Planner

Plan Trip
[A college is selected]

Shortest
Trip Planner

Plan Trip
[A college is selected &&
campusToVisit > 0]

End Node goes to
the Souvenir
Page

End Node back to
the Student Page

Start Node should
had come from
the Trip Planning
Page

Souvenir Page

Buy Button

[1 or more items
were bought]

Done

Trip Summary

Done