(#1)

As a prospective student, I should be able to view a list of colleges and their distances to Saddleback College.

1. Description
    a. A user should be able to view a list of colleges and their distance to Saddleback College so that they may learn how far away each campus is.
2. Assumptions
    a. Initial data holding the distances of at least 11 colleges will be provided.
3. Tasks
    a. Implement a way to view a list of colleges
    b. Implement a way to view a list of those colleges' distances from Saddleback College
4. Tests
    a. Any user may view the list of colleges
    b. All colleges have their distance from Saddleback College listed.
5. Done
    a. All colleges in the list of colleges are displayed and visible to any user.
    b. All colleges have a listed distance from Saddleback College.
6. Assignee
    a. Ethan Lew
7. Estimate
    a. 3
8. Priority
    a. S1

(#2)

As a prospective student, I should be able to view traditional souvenirs from each campus.

1. Description
    a. Any user should be able to view souvenirs from each campus along with their prices so they can decide upon if they want to buy them.
2. Assumptions
    a. There may be at most 7 souvenirs per campus.
3. Tasks
    a. Implement a way to view a list of souvenirs from a given college
    b. Implement a way to select a college to view souvenirs from
    c. Display the price of each souvenir
4. Tests
    a. Souvenirs and their prices are listed based on the corresponding selected college
    b. Only the souvenirs from the selected college are listed
    c. Only one college can be selected at a time
5. Done
    a. Any user may select a college to view souvenirs from
    b. Any user may view a list of souvenirs and their prices from the selected college

    c. Only the selected college's souvenirs are listed
6. Assignee
    a. Ethan lew
7. Estimate
    a. 5
8. Priority
    a. S1

#3: As a rising high school senior, I live in Orange County, California and I want to visit all the local colleges around me so I can decide which colleges to apply to.

1. Description:
    a. The user starts their trip at Saddleback. The user then visits the next campus closest in distance to Saddleback and so on.
2. Assignee: Nicholas Lozano
3. Estimation: 5
4. Priority: S2
5. Assumptions:
    a. Program can keep track of all colleges selected from its database.
    b. The user visits all the 11 initial colleges shown
6. Task:
    a. The origin (starting point) of the trip begins at Saddleback.
    b. Find the next closest campus from Saddleback in terms of distance
    c. Distance from the original campus to the other campuses will be compared.
    d. The shortest distance from the original campus to the next campus is picked
    e. Repeat the step above until all college campuses are visited.
    f. The total distance of the trip should be displayed.
    g. The total distance is calculated by summing the distances from the order of the college campuses visited.
7. Tests
    a. Program can determine the next college campus to visit.
    b. Total distance of the trip to be calculated and displayed to the user.
8. Definition of Done
    a. All trips are started at Saddleback.
    b. All 11 campuses are visited.
    c. Total distance travelled is displayed for the user at the end.
    d. All campuses are visited in the correct order.

#4(a-d):

As a high school junior, I want to visit as many colleges as possible in the shortest distance possible to save gas, starting at ASU.

1. Description:
    a. The user starts their trip at Arizona State University. The user should be able to choose the number of colleges they want to visit afterwards.
2. Assignee: Ethan Lew
3. Estimation: 10
4. Priority: S2
5. Definition of Done:
    a. The user can select the colleges to visit.
    b. Only the selected colleges are visited
    c. Colleges are visited in the correct order, with Arizona first.
6. Assumptions:
    a. Program can keep track of all colleges selected from its database.
    b. Any number from 1-20 colleges can be visited.
7. Task:
    a. The origin of the trip begins at Arizona State University
    b. Select the colleges the user wants to visit after Arizona State University.
    c. Boxes to click for other colleges to visit
    d. After Arizona State University, find the next closest college in terms of distance from the previous campus. (Must be done recursively)
    e. Distance from the original campus to the other campuses will be compared.
    f. The shortest distance from the original campus to the next campus is picked
    g. Repeat the step above until all campuses are visited
    h. The total distance of the trip is displayed.
    i. The total distance is calculated by summing the distances from the order of the college campuses visited.
8. Tests
    a. User can select the colleges they wish to visit
    b. Program can determine the next college campus to visit.
    c. Total distance of the trip to be calculated and displayed to the user.

#4e:

As a high school student, I want to be able to purchase merchandise for the campuses I am visiting.

1. Description:
    a. User should be able to purchase merchandise for the campuses being visited
2. Assignee: Yaseen, Nicholas
3. Estimation: 8
4. Priority: S3
5. Definition of Done:
    a. User can purchase merchandise from each campus
    b. All merchandise from the selected campus is displayed
    c. The total amount of money spent is accumulated and displayed.
6. Assumptions:
    a. The database will have souvenirs with names, campuses, and prices.
7. Task:
    a. Implement a form for users to select and purchase souvenirs
    b. Calculate the amount of money spent at any given campus and all campuses total.

(#5)

As a prospective college student, I have the option to plan a custom trip

1. DESCRIPTION:
    a. The program will have the ability to allow a college student to select the starting college campus they wish to visit, allow a college student to select all other college campuses they wish to visit
        i. Plan the trip starting with the selected campus then visit each of the other college campuses in the most efficient order (recursively choose the campus closest to the previous campus).
        ii. Display the total distance traveled. Allow the college student to purchase multiple traditional souvenirs when visiting the college campuses
2. TASKS:
    a. As a prospective college student, I can select a starting college and select other campuses I wish to visit.
    b. My trip will start at the selected college and then proceed in the most efficient order.
    c. The program should display the total distanced traveled and allow me to purchase multiple
    d. traditional souvenirs when visiting college campuses

3. TESTS:
    a. Verify that a prospective college student can select a starting campus.
    b. Verify that a prospective college student can select more colleges to visit
    c. Verify that my trip is conducted in the most efficient way
    d. Verify I can purchase multiple souvenirs at each college campus

4. ASSIGNEE: Ethan Lew
5. ESTIMATION: 15
6. PRIORITY: S3
7. DONE:
    a. Any user can begin a trip at their selected campuses.
    b. Their trip is planned in the most efficient manner.
    c. They can purchase multiple souvenirs from each college.

(#6a) As a prospective college student, I can purchase multiple souvenirs so that I may have more than one.

1. DESCRIPTION:
    a. The program will have an option to purchase multiple souvenirs.
    b. The user will not have to purchase single souvenirs multiple times.
2. TASKS:
    a. Implement a way for users to specify how many souvenirs to buy
    b. Calculate the total price accordingly.
3. TESTS:
    a. Verify that the user can add and delete souvenirs.
4. ASSIGNEE: Yaseen, Nicholas
5. ESTIMATION: 10
6. PRIORITY: S3
7. DONE:
    a. A prospective college student can buy multiple souvenirs.
    b. The total price is calculated accordingly.

(#6c)

As a user, I can see the total amount spent at each college campus and a grand total for all campuses visited.

1. DESCRIPTION:
    a. The program will display the total amount spent at each campus and the grand total for all campuses visited.
2. TASKS:
    a. As a user I can see the amount of time spent at each individual campus
    b. As a user I can see the total amount of time spent at all campuses
3. TESTS:
    a. Verify that I can see the total time spent at each college and the grand total
4. ASSIGNEE: Yaseen, Adrian
5. ESTIMATION: 15
6. PRIORITY: S3
7. DONE:

a. User will be able to see grand total amount spent at each individual college and the grand total for all campuses

(#7a)

As an administrator, I can read from an input file so that new campuses and their souvenirs can be added.

1. Description:
    a. The program will have an option to add new campuses and their souvenirs. The option will only be available to an administrator user. When adding new campuses, the information is read from an external input file.
2. Tasks:
    a. As an administrator, I should be able to add new campuses and their souvenirs at any time.
    b. As an administrator, I should be able to provide an input file to be read by the program.
3. Tests:
    a. Verify that the option to add campuses is only available to an administrator.
    b. Verify that an external file can be read by the program.
    c. Verify that the correct information is being stored when reading from the external file.
    d. Verify that the program does not attempt to add more campuses that can be stored at the time.
4. Assignee:
    a. Yaseen Khan
5. Estimation: 10
6. Priority:
    a. S1
7. Done:
    a. Administrator can access the option to add campuses and their souvenirs.
    b. Program reads from an external file to obtain information about campuses and souvenirs.
    c. Information read from an external file is stored in the correct data structures.

(#7b, c, d)

As an administrator, I can modify the available souvenirs of any college campus.

1. Description:
    a. The program will have an option to modify a campus's souvenirs. The option will only be available to an administrator user. Souvenirs can be added, deleted, or their prices can be changed.
2. Tasks:
    a. As an administrator, I should be able to change the price of any souvenir of any campus.
    b. As an administrator, I should be able to delete any existing souvenir of any campus.
    c. As an administrator, I should be able to add a souvenir to any campus with less than 7.
3. Tests:

    a. Verify that the options to modify souvenirs is only available to an administrator.
    b. Verify that any souvenir of any campus may have its price changed.
    c. Verify that any existing souvenir of any campus may be deleted.
    d. Verify that a souvenir may be added to any campus with less than 7 existing souvenirs.
4. Assignee: Ethan Lew
5. Estimation: 8
6. Priority: S2
7. Done:
    a. Administrator may access the option to modify souvenirs of any campus.
    b. Souvenirs can have their price modified and saved.
    c. Souvenirs can be properly deleted or added to any campus and saved.

(#8)

As a prospective student, I can choose to visit all 13 college campuses starting from UCI.

1. Description:
    a. The program will have an option to visit all 13 college campuses beginning at UCI. The total distance traveled will be displayed. The user will have the ability to purchase traditional souvenirs when visiting the campuses.
2. Tasks:
    a. As a general user, I should be able to begin a trip to all campuses starting from UCI.
    b. The program should display the total distance traveled between the campuses.
    c. The program should allow the user to purchase any souvenirs from the visited campuses.
3. Tests:
    a. Verify that the trip begins from UCI.
    b. Verify that all 13 campuses are visited in the trip.
    c. Verify that the total distance is calculated and displayed.
    d. Verify that the user can purchase any souvenirs from the campuses that are visited.
4. Assignee: Nicholas, Ethan
5. Estimation: 8
6. Priority: S2
7. Done:
    a. Any user can begin a trip from the UCI campus.
    b. The trip passes through all 13 campuses.
    c. The total distance traveled is calculated and displayed.
    d. The user can purchase any souvenirs from any campus being visited.

(Misc. 1) (baseline)

As an administrator, I can choose to log in as an administrator.

1. DESCRIPTION:
    a. The program will have a text field for an administrator password. The correct password will grant administrator privileges to the user.

2. TASKS:
    a. As any user, I should be able to enter a password to attempt to log in as an administrator.
    b. If the password is valid, the program should consider the user an administrator.
    c. If the password is invalid, a notification saying so is output.
    d. While the user is an administrator, they should have the option to modify campus souvenir data.
    e. While the user is an administrator, they should have the option to add new campuses.
3. TESTS:
    a. Verify that the user can enter a password to attempt to log in as an administrator.
    b. Verify that, if the password is correct, the user is thereafter considered an administrator.
    c. Verify that, if the password is incorrect, no changes are made.
    d. Verify that while being considered an administrator, all other features which require administrator privileges are available to be used by the user.
4. ASSIGNEE: Nicholas Lozano (Completed prior to leaving the class)
5. ESTIMATION: 1
6. PRIORITY: S1
7. DONE:
    a. A text field is accessible to input a password.
    b. Entering a valid password grants the user administrator privileges for the remainder of program execution.
    c. Entering an invalid password will output a notification and makes no other changes.