D2.2 - Project Group 15
CS 386
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GitHub Link: https://github.com/cds327/BAL-Calculator.git

Christopher's Use Case

BAL Calculator
Use-Case: Friend to convince drunk/intoxicated

1 Brief Description

This is wherein a friend of a user is drunk or intoxicated and would like to use our BAL Calculator application to convince them they are not ok to drive or that they are drunk.

2 Actor Brief Descriptions

2.1 User

2.2 Mobile Application

2.3 Friend

3 Preconditions

The user's friend thinks that the user is drunk and/or intoxicated and has our BAL Calculator installed onto a quickly accessible mobile device wanting to gain an accurate reading on their current blood alcohol level.

4 Basic Flow of Events

1. The use case begins when the friend or user opens our BAL Calculator app,
2. Friend will ask user to decide if they want to save common information,
3. Friend will ask user enter in height, age, weight
4. Friend or User will fill in information to get a reading
5. Our BAL Calculator application calculates the blood alcohol level,
6. Result is returned to user
7. Friend now has leverage to convince user that he is drunk
8. The user and/or friend navigate away or close application.

5 Alternative Flows

5.1 Already saved information 1

If in step 3 of the basic flow if the information is already saved, then

1. User and/or friend of user does not have to enter weight, height or age
2. The use case resumes at step 4 and will fill in normal form to get reading.
3. User will progress through the basic flow until step 8 when they navigate away.

5.2 Already saved information 2

If in step 2 of the basic flow if the information is already saved, then

1. User and/or friend of user does not have to decide if they want saved info
2. The use case resumes at step 4 and will fill in normal form to get reading.
3. User will progress through the basic flow until step 8 when they navigate away.

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7 Key Scenarios

7.1 User / Friend Does not enter in correct info

1. User on step 3 of the basic flow gives bad information
2. User proceeds to fill in all other correct information about their drinking
3. User gets a result from the BAL Calculator that is not correct
4. User has a false positive and could commit dangerous acts

7.2 User of application has saved info from another user

1. User on step 3 of the basic flow has bad information saved
2. User proceeds to fill in all other correct information about their drinking
3. User gets a result from the BAL Calculator that is not correct
4. User has a false positive and could commit dangerous acts

7.3 User / Friend Does not enter in correct info 2

1. User on step 4 of the basic flow lies or receives a lie about how much drinking
2. User proceeds to get a result from the BAL Calculator that is not correct
3. User has a false positive and could commit dangerous acts

8 Post-conditions

8.1 User takes advice

User will take the advice from the application when results are true and use information to be safe.

8.2 User closes or navigates away from app

User after receiving the information will close the application and continue on.

8.1 Application must not drain battery

After the user or during when the user is using the application battery consumption should be low since leaving a drunk/intoxicated individual without a phone is never a good thing after user navigates or closes the app the app must release all resources.

9 Special Requirements

User must be able to read English.
User must be able to use the application on their phone.
User must be inputting correct information in order to get correct result.

Use-Case: User enters BAL entry

Corban's use case

1 Brief Description

User acting with the application on their phone

2 Actor Brief Descriptions

The actor in this use case is the application user

2.1 User

3 Preconditions

User must have application downloaded on their mobile device.

4 Basic Flow of Events

1. User opens the app.
2. User taps on the button to take a BAL test.
3. User takes the test to determine their BAL
4. The application then uses that data to determine the user's BAL
5. The users calculated BAL is displayed to the user
6. The user is also notified is he or she is able to drive or not under their current conditions
7. The user closes the application

5 Alternative Flows

5.1 alternate flow 1

If in step <x> of the basic flow the <actor or system does something>, then

1. User is under 21
2. App will not allow person to calculate a BAL if they are under 21
3. Application closes

6 Key Scenarios

6.1 scenario 1

1. User is under 21

7 Post-conditions

7.1 post-condition 1

Successful completion: log file is created and stored accordingly and the process stops

Unsuccessful attempt: log file is created and updated accordingly

8 Special Requirements

User must be over 21
User must provide accurate information or else the app will not work properly

Itreau Bigsby's Use Case

BAL Calculator
Use-Case: Application displays past entries

1 Brief Description

When a user navigates to the history tab, the application will retrieve and display previous entries to the user.

2 Actor Brief Descriptions

2.1 Application

Application will store and retrieve previous user entries to the screen.

2.2 User

User will navigate to history activity which will signal to the application that the data must be retrieved for display.

3 Preconditions

User has application installed on their mobile device (android based). User has at least 1 BAL entry that the system can display.

4 Basic Flow of Events

1. User opens application on device.
2. User clicks “History” button from application menu.
3. History activity opens and application retrieves and displays past user entries.

5 Alternative Flows

5.1 User Enter’s First Entry Prior

1. User enter’s a BAL entry into calculator (Consult “User Enter’s BAL entry” use-case)
2. User selects “Menu” button from current BAL results screen.
3. User selects “History” button from application menu.
4. History activity opens and application retrieves and displays past user entries.

5.2 User Has No Past Entries

1. User opens application on device.
2. User clicks “History” button.
3. History activity loads.

4. Application notices that no entries have been entered into application so “No History Available” displays

6 Key Scenarios

6.1 User is Under 21

6.2 User is not Impaired

7 Post-conditions

7.1 Successful Data Retrieval

If the data is retrieved successfully, the application displays the use history in the current activity.

7.2 No Data Retrieved

If the user has never entered an entry prior to this use, the application must alert the user to this fact within the current activity.

7.3 Data Retrieval Error

If the application encounters an error while retrieving the data, the application must alert the user of this fact within the current activity.

8 Special Requirements

User must be over 21.

User must have the application installed on the device prior to use.
The user should (but doesn't have to) have logged at least one BAL entry prior to viewing history.

Blood Alcohol Level Calculator Android App

Use-Case: User use case, Nathan Payton- McCauslin

1 Brief Description

The following is a description of the consumers of our product and how they will use it.

2 Actor Brief Descriptions

2.1 People who are drinking alcohol or plan on drinking alcohol.

2.2 People who plan on drinking alcohol in the near future.

3 Preconditions

3.1 The user is over 21 years of age.

3.2 The user has an android phone.

4 Basic Flow of Events

1. The use case begins when someone decides they want to drink alcohol or is already intoxicated.

2. The user opens up the application.
3. The user enters their information.
4. The user clicks calculate blood alcohol level.
5. The user receives their BAL reading.
6. The user is given an indication to whether or not they can drive as well.
7. The user closes the app or saves their information for easy later usage
8. End of use case.

5 Alternative Flows

5.1 Using the app just for fun

If in step 1 of the basic flow the user does not plan to drink or is drinking, then

1. The user is just using the app for fun.
2. The use case resumes at step 2

7 Key Scenarios

7.1 Drinking Responsibly

1. A user has become intoxicated.
2. The user is having trouble determining whether or not they are capable of driving.
3. The user realizes they have our app that will tell them the answer.
4. The user inputs their information.
5. The user get a reading to show whether or not they can drive.

7.2 Drinking Responsibly (future telling)

1. A user wants to begin drinking alcohol.
2. The user wants to know how much they can drink before they would be unable to drive.
3. The user realizes they have our app that will tell them the answer.
4. The user inputs their information.

5. The user gets a reading to show how many of a specific type of drink they can have while still staying under .08 BAL.

7.3 For Fun

1. A user and their friends have been drinking alcohol.
2. The user decides it would be fun to see how intoxicated everybody has gotten.
3. All the friends enter their information and receive readings on their BAL.
4. They share some laughs and force the least intoxicated person to drink more to catch up.

8 Post-conditions

8.1 The user receives their BAL reading and the decision to drive or not falls on them.

9 Special Requirements

None other than specified in the preconditions.

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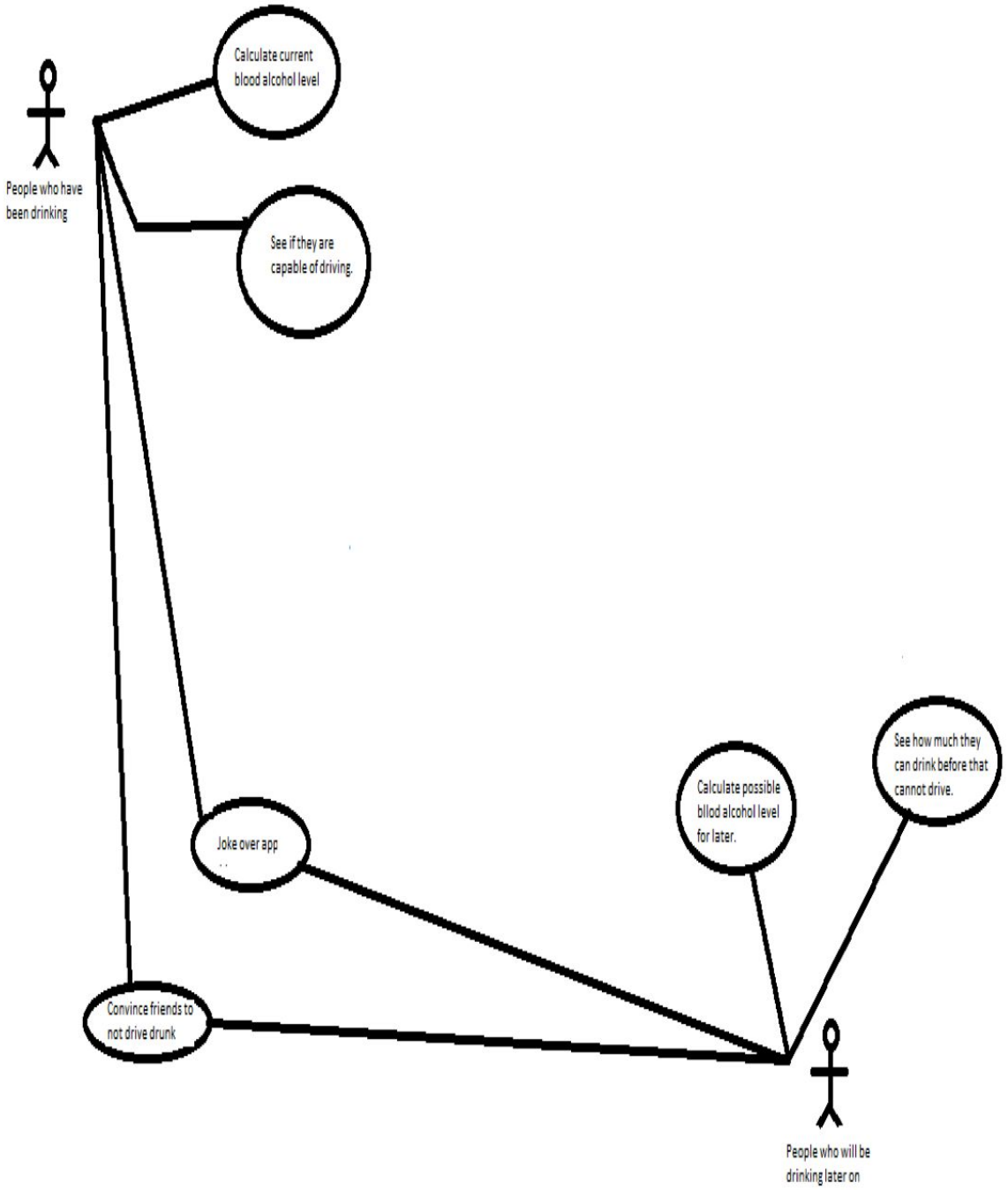

Group Participation:

Itreau: One full use case written.
Christopher: One full use case written.
Nathan: One full use case written and visual diagram.
Corban: One full use case written.