BAL Calculator	
Vision	Date: 03/07/2017

D2.1 - Project Group 15
CS 386
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GitHub Link: https://github.com/cds327/BAL-Calculator.git

BAL Calculator
Vision

1. Introduction

1.1 Purpose:

- The purpose of this document is to define the high-level requirements of our BAL Calculator project.
- To give the problem we are solving by this project's creation.
- To identify and describe the types of users that our solution will serve.
- We define the needs the users requested as well as the general project features.

1.2 Scope:

- This document affects the Android mobile application that will be developed for use in real life applications where the user may be impaired.

1.3 References:

- "Blood alcohol content", https://en.wikipedia.org/wiki/Blood_alcohol_content
- "Android Developers", https://developer.android.com/index.html

1.4 Definitions, acronyms, abbreviations:

- BAL - Blood Alcohol Level

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Vision	Date: 03/07/2017

2. Positioning

2.1 Problem Statement

The problem of	*Not being able to tell if you're too intoxicated to drive or function normally without the need for expensive hardware*
affects	*the intoxicated users and the friends of those intoxicated users who would want to know a more accurate BAL calculation*
the impact of which is	*could cause poor judgement and the possibility for car accidents and or other bodily or monetary harm to the individuals in this situation who can't afford expensive BAL testing equipment*
a successful solution would be	*to enable the user to get a accurate and fast BAL reading in order to make smart, responsible, decisions when out drinking.*

2.2 Product Position Statement

For	*21-24 year olds that go out drinking*
Who	*needs to know their BAL while they are intoxicated*
The (product name)	*BAL Calculator*
That	*Will be able to accurately tell the user if they are too intoxicated or not.*
Unlike	*The alternative of guessing or relying on other friends that might be drunk to tell if you are ok to drive or not.*
Our product	*Will be able to solve the problem by taking the guess work out of judging if you [the user] are ok to drive and are not too intoxicated.*

3. Stakeholder Descriptions

3.1 Stakeholder Summary

Name	Description	Responsibilities
1.developers 2. research team 3. marketing team	1. group that is developing the application 2. group asking people what they would want from our product 3. group that will market the product to people	1. ensures that the system will be maintainable, and is responsible for creating the product 2. makes sure that when the application is released that it has features that people actually want 3. ensures that the product will have advertising and appeal to customers so that they will buy it

3.2 User Environment

Number of people involved in completing the task: 1 single user only

Is the task changing: The main task of calculating BAL should remain the same

How long is the task cycle: it should not take a very long time to complete this task preferably around 1 minute

Unique environmental constraints: ideally this will be a mobile app so it will have to function on a mobile platform ideally on both IOS and Android.

Which system platforms are in use today: IOS and Android will be our main focus.

Are there any other applications in use: In the future we may need to interface with some kind of hardware; however, right now our application does not need any other applications to run.

4. Product Overview

4.1 Needs and Features

Need	Priority	Features	Planned Release
Calculate the amount of blood the user has.	1	Need multiple user settings. Needed in order to calculate the user's BAL.	3/02/2017
Calculate the amount of alcohol in given different drinks.	1	User selects a kind of drink and the program uses the alcohol level of that drink in calculating BAL.	3/02/2017
Easy to use (since people will likely be impaired when using it)	2	Save a user's information so the only thing they need to edit is the amount and what they drank.	3/30/2017
Extensive Testing	1	The application could potentially cause harm if inaccurate so extensive tests need to be done before release.	5/02/2017

BAL Calculator	
Vision	Date: 03/07/2017

Fun to use and pretty to look at	2	Add graphics and colors to make the app look spectacular.	5/02/2017

5. Other Product Requirements

Requirement	Priority	Planned Release
Mobile Smart Phone Requirement: This application is only supported on mobile devices. This requires users to have a mobile device.	1	3/02/2017
Google Material Design Constraint: Our platform is Android. Therefore, implementation requires that we follow appropriate Material Design standards.	1	3/02/2017
Disclaimer: A disclaimer is required when operating this application. This disclaimer MUST outline that supported users are only users that are above legal drinking age. This disclaimer is also required to state the dangers of drinking and that no calculated BAL is 100% accurate.	1	3/30/2017
Android Version Constraint: Due to the fact that our target audience is Android users, we need to target as many Android versions as possible while implementing. This will give us a fairly large potential audience.	2	3/02/2017

Minimal number of activities (Android Screens): Due to our previous requirement (easy to use due to the fact that users may be impaired) we need to ensure each action requires a minimal number of screens.	3	3/02/2017
Impairment driven operation: Based on what items may be harder to navigate due to impairment (bright colors, dark colors, boundaries, no boundaries, etc.) we need to express or suppress these elements as necessary.	4	3/30/2017
Performance: Upon completion, application should run quickly and effectively on the native device.	4	5/02/2017
Fault Tolerance: Should have low fault tolerance. Due to the compactness and low resource usage, this shouldn't require much change in implementation.	4	5/02/2017
Usability: Upon completion, impaired users should have no problem using appplication. Thus, usability is very important.	4	5/02/2017

Group Participation:

Christopher: Introduction

Nathan: Positioning, Stakeholder Descriptions

Corban: Product Overview

Itreau: Other Requirements