Deborah Barndt

ITMD 511: Application Development Methodologies

Professor Peisong Huang

HW3

2-7-18

HW3

Project Requirements Document – Tips Calculator

**Stakeholders**: Deborah Barndt (Programmer), Peisong Huang (Professor, Project Manager)

**Task Force**: Deborah Barndt, Peisong Huang

**Document Modification History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 2-7-2018 | Deborah Barndt | Initial Version |

**Project Description**

Geekbit Creations will have a tip calculator android application that will serve the community by providing an uncomplicated way for users to determine how much the tip should be and what the total cost of them meal would be including tip.

**Service Need**

The Geekbit Community has a need for calculating tips, splitting the bill, and gratuity. Tip calculators have shown to be effective in properly calculating tips and splitting the bill when going out to eat.

**Project Purpose & Scope**

The purpose of this project is to provide android users with a simple application for calculating tip and calculating how much to pay on the bill.

**Technical Challenges / Issues**

Geekbit Creations is aware of other tip calculators out there. Ease of use for the end-users and not being able to split the bill was an issue that we noticed with other applications.

**Timeline**

|  |  |
| --- | --- |
| Review of Products | February 7, 2018 |
| Install, Development, and Internal Testing | March 7, 2018 |
| Beta Roll-Out | April 7, 2018 |
| Production Roll-Out | May 7, 2018 |
| Annual Review | February 7, 2019 |

**Requirements**

**Functional Requirements**

Primary:

1. Users can put in the meal cost.
2. Users can put in a custom tip percentage.
3. Users can put the tax percentage.
4. Users can cancel the calculation.

Future development:

1. Users can put in how many people the bill is being split with.
2. Users can save their chosen tip percentage.
3. Users can convert the currency amounts for different areas.

**Technical Requirements**

Primary:

1. Display a “Please wait” message if there is more than a .3 second delay in displaying the result.
2. The app should have text fields for meal cost, tax percentage, tip percentage, and total meal cost.
3. The calculate button should add the meal cost, tax percentage, and tip percentage together; and display the result in the total meal cost field when the button is clicked.
4. The cancel button should reset and clear the fields when the button is clicked and display a “Cleared” message.
5. All buttons should have the positive buttons on the left and negative buttons on the right and displayed in the same row.

Future development:

1. Add a drop-down menu with a list of other currencies for the user to choose and convert the other text fields to the chosen currency.
2. Add a save button that shall save the users custom tip percentage, and automatically enter the users custom tip when the tip calculator is used.
3. Add a drop-down menu with numbers from 1-15 for the number of people to split the total meal cost with and add another text field for cost per person that will take the total meal cost and divide it by the number of people selected.
4. Display a message asking the user for confirmation that the user wanted to reset or clear the form fields.

**Usability Requirements**

Primary:

1. All delays in the system longer than .3 seconds will produce a message that says “Please wait”.
2. All buttons in the system will adhere to established button conventions as listed in the technical requirements.
3. Screen layout and color should be appealing in monochromatic shades of blue with the background a pale shade of blue and the button a slightly darker shade than the background.
4. All field elements should be easy to read and understand with clear font families like Arial and sans-serif and font size 16px.

Future development:

1. Add a splash screen that will display for .4 seconds that will display a custom graphic for the tip calculator application when the application is opened.
2. All actions that cannot be undone by the user should display an “Are you sure?” confirmation message with a yes or no button to be pressed to confirm by the user.
3. Add a custom designed calculator icon clipart style graphic that will display the tip calculator name.

**Project Constraints**

***Time constraints:***

The system needs to be ready for beta-testing during the spring of 2018 to prepare for the application launch in May.

***Cost constraints:***

Budget funding is limited, so any additional spending will need to get approval of from the project manager.

***Scope constraints:***

Project will be limited to dealing with the software installation, customization, and implementation for android devices. Once the project is complete, the application will need to be developed for iOS.

**Documentation**

**Administrative Documentation**

Administrative documentation will be available on the Geekbit Creations Wiki, and will be reviewed and updated annually as part of the annual review process.

**Technical Documentation**

Technical documentation will cover the installation and customization of the software.

**End-User Documentation**

End-user documentation will be developed during 2018.