**Software Engineering 2 Project #1: Campus Card App**

Team Members:

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**Goal of Project**

The goal of this project is to provide a functioning application that is similar to a college’s campus card. For example, the Texas Tech University raider card can perform multiple functions such as buying food through meal plan credits, and buying items through the raider cash funds. Our application will imitate these functions and more. This application will provide a simple environment for users to easily navigate through and perform their desired function. Users will be able to deposit funds into their card from their desired option between meal plan credits and raider cash. Meal plan credit will only be permitted to spend credits on food from restaurants and corner shops on campus. Raider Cash will only be permitted to spend funds on school supplies, printing fees, and vending machines that are on the campus’s territory. Users will not be permitted to buy items with their meal plan credits and will not be permitted to buy food from campus restaurants and corner stores with their raider cash funds.

This application will also permit users into creating a new card account where new users can set up their account and decide on the amount of credits to be added to their card. This application will simulate a college campus’s ID card and users will be able to perform functions throughout the application.

**Potential Users**

The potential users for this application will be students since this is a campus card app. It enables students to have a form of ID, spending credits for food and items, and an access key for certain rooms around the campus.

**Functionalities**

The College Campus Card application will provide five functionalities in a menu format that users will be able to choose from. The functionalities are being able to buy food, choosing a restaurant to buy food from, being able to buy items, being able to deposit funds into two forms of college credit(MealPlan Credit and RaiderCash), and being able to create a new card for new users. Whenever a user exits one of these functionalities the user will be prompted a message asking if they would like to continue. If they input yes, the menu will be displayed again. If they input no, the program will end.

* + **Buy Food (Elijah Silang/Eduardo Lozano)**

The Buy Food functionality will simulate a student going to multiple Texas Tech University restaurants and a corner store called Sam’s Place. When the user selects this function a message will be displayed to confirm the user’s account so the application can access the accounts funds. Then a menu will be displayed showing all of the available food items the user can choose from such as pasta and a hamburger. Each available food item will have a corresponding price. A message will be displayed to the user asking them what food item they would like to buy. The user then can input the food item’s name of the food the user would like to purchase. The corresponding price of the food item will be deducted from the meal plan credits on the users account. If there is not enough funds in the account to buy the desired food item a message will be displayed telling the user there is not enough credits in the account. After the user has bought an item a message will display asking the user if they would like to purchase another item. If they input yes, the menu from Sam’s will be displayed again. If they input no, the user will exit the Buy Food functionality.

* + **Buy Item (Michael Dichiara)**

The Buy Item functionality will simulate a student going to the Texas Tech University SUB Barnes and Noble. When a user selects the Buy Item functionality a message will be displayed to confirm the user’s account so the application can access the account’s funds. Once the account is verified a menu will be displayed of all the available items at Barnes and Noble such as a scantron and a bluebook. A corresponding price for each item will be displayed and a message at the bottom asking the user if they would like to purchase an item. The user then can input the desired item and the corresponding amount will be deducted from the raider cash funds of the users account. If there’s not enough funds a message will be displayed. Once a purchase is made the user has two options: to exit this functionality or to buy another item.

* + **Add Funds (Elijah Silang/Michael Dichiara)**

The Add Funds functionality will simulate the user adding funds to their account. When this functionality is selected a message will be displayed asking the user to input the name of the account they wish to add funds. Once the account is verified, a message will be displayed asking the user which currency they would like to add funds to. The options are between MealPlan credits and RaiderCash. Whichever one the user selects, a message will then be displayed asking the user for the deposit amount.

The user then inputs the desired amount and now the account will have the specified amount to make purchase with.

* + **Add New Student (Elijah Silang)**

The Add New Student will simulate a student creating an account to receive a campus card. When this functionality is selected it will ask the user for their name for input. Then the program will ask the user for their address and followed by asking the user for their age. After the user has inputted this info, the program will ask the user if they would like to specify meal plan amount and RaiderCash amount. If yes, the user will be asked to enter the meal plan amount and then will be asked to enter the raider cash amount. If no, 100 meal plan credits and 50 RaiderCash will be deposited into the new students account.

* + **Choose Restaurant (Eduardo Lozano)**

The Choose Restaurant will allow the user to pick from which restaurant they want to purchase food from. After the user has registered, they may order food. When choosing to order food, they are given options on where to purchase food from. The user can choose between Sam’s Place, One Guy Pizza, or Lou’s BBQ. Each restaurant has its own unique menu. After the user picks a restaurant, they are given the menu where they may pick from any of the available items. From here, the buy food functionality will be used where the user may purchase food from the restaurant they picked in the menu.

* **Add Permissions (Steven Warwick)**

The add Permissions will allow the student to add permissions to their card for restricted rooms around campus. When the student first makes their card it will add what room permissions they have to the card. Students may view what permissions that they have at any time from the menu. From the menu room permissions may be changed to allow for new or existing rooms to be added or removed depending on what the student should have.