

Criterion B: Analysis

Proposed solution: Mobile Application for iOS Devices

Requirement specifications

IT system requirements

- Hardware - Macintosh computer with Internet connection, at least 2.26 GHz Intel Core2 Duo processor, 8GB 1333 MHz DDR3 SDRAM, 256MB NVidia GeForce 9400 M VRAM, 500GB 7200RPM Hard Disk Drive. Apple iOS device with at least iOS 7.0.
- Software - Mac OS X 10.9, Apple Xcode for creating the application, Webs Site for News and Calendar, Any Web Browser
- Network - Access to Internet and websites required (ie. Google, Apple), Apple Developer Account

System Interactions

- Compatibility requirements are moderate; Xcode for designing the application is only compatible with Mac OS X computers. Only works with iOS devices.
- Compatibility concerns consist of creating an News feed on a Webs site to match formatting on mobile device
- Making the application compatible with 3.5" iPhones as well as 4" iPhones
- Backup of Webs Site and iOS Application

Input/output requirements

Input requirements

- Interaction from users
- Information to be posted to the Webs site for news and events

Output requirements

- Well-designed User Interface for mobile application
- Simplistic website to be used solely for the news and events feed
- Application that loads quickly and is responsive
- Members must be able to see access all information upon launch of the application
- Members must be able to email the appropriate person within the contacts section

Processing

- Coding the application in Objective-C
- Utilizing original content
- Create proper headings for each section
- Create templates for forms
- Create a method of participating in polls and surveys

Security

- Manage the content on the Webs site and backing up data frequently
- Only Ms. Gates and myself will know usernames and passwords to the website
- Only I will know the passcode to the Apple Developer Account
- Future features can be added via software updates as needed

Specific performance criteria

The effectiveness of the mobile application will be tested and approved only if the following conditions are met:

- a) A well-designed user interface for the iOS application with periodic updates
- b) Up-to-date news and event information on Webs site
- c) Interactivity from the mobile application to promote an increase in member involvement
- d) Twitter feed availability
- e) Ms. Gates is provided access to the Webs backend website

If requirements are not met, the application will be reworked to comply with the aforementioned conditions.

Additionally, an alternative solution could be to create a simple website. However, it is not as involved a way to interact with members on a more personal level.

Justification of chosen solution

Creating a mobile application is the best solution that further invokes members to comply with club instructions. This directly addresses the concern expressed by Ms. Gates in Criterion A; it allows for greater member participation in a variety of club plans/actions by presenting information in a location that members regularly check. Most importantly, by utilizing a mobile application as the primary means of communication and correspondence with members, members will be able to receive information in a more timely manner which will allow the Marvin Ride High School chapter officers of Future Business Leaders of America and Ms. Gates time to execute tasks in a more formidable manner which allows for a more profound impact on club offerings and club performance.

With this solution, members will be able to access meeting information, access news and event information, view the Twitter feed, and contact any advisor or officer of the club. This will allow Marvin Ridge High School FBLA to provide a more direct and easily-accessible method for attaining information and ultimately providing an overall more rewarding experience for all members. This will allow more members to be interested in officer positions and further grow the club after the departure of each senior class. Essentially, the mobile application and its profound effects on the club will leave a legacy for future MRHS FBLA chapters to come.

There was some concern about some members being confused about how to use the application at first. However, the idea of explaining the ideology and methods of the application to the members at a club meeting was brought to attention. Members can also opt out of this service if they feel this violates their rights to privacy.

Apple's mobile application solution is the most beneficial because iOS is the most widely used smartphone platform in MRHS FBLA. If there is a problem, Apple's support staff are always available 24/7. Since there are not many non-Apple users in MRHS FBLA, the majority of members will be reached by this method. Therefore, Apple and the iOS platform is best and most viable option for MRHS FBLA.

Word Count = 349