Feasibility Study and Project Plan

CIS 4911 – Senior Project U01

Virtual Job Fair 2.0

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**ABSTRACT**

The Feasibility Study and Project Plan document gives an introduction to the Virtual Job Fair 2.0 System. Chapter 1 gives basic information about the Virtual Job Fair 2.0, including the problem definition, background on the problem, definition of important terms, and an overview of the document. Chapter 2, the Feasibility Study chapter, provides a description of the current system used worldwide and introduces the purpose of our system, and states the list of high-level user requirements. Finally, this chapter includes an analysis of alternative solutions to the problem.

Chapter 3, Project Plan, introduces project management concepts of the project, such as personnel organization, hardware and software resources used for the project, and a list of tasks, milestones, and deliverables. Chapter 4, the appendix, contains miscellaneous charts and information, such as a GANTT chart with the project schedule, a feasibility matrix, a cost matrix, and a diary of meetings. Finally, Chapter 5 contains references to external documents that have been used for reference.

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# 1. Introduction

The introductory chapter gives some background about the Virtual Job Fair 2.0 system. Firstly, the chapter states the current problem with the interview process of companies, and some background on this problem is provided. Also, background information was provided on the previous Virtual Job Fair project. Moreover, definitions, acronyms, and abbreviations of terms that will be used in this deliverable are introduced and explained. Finally, this chapter contains an overview of the whole project, which explains the information contained on each chapter.

## 1.1. Problem definition

Employers looking for talent are always interested in filling out positions with the best possible people. In order to accomplish this task, the most effective method to date is to tap local talent, whether it is at universities or job fairs. Given the increasing globalization trend, and the fact that not all employers have the financial or logistical capabilities to seek for potential candidates in different locations, the current solution provided by universities and job sites is less than ideal.

Our solution to this problem intends to provide a more transparent interview process that allows employer and potential employee to interact as closely as possible and provide a better interview experience.

## 1.2. Background

The Virtual Job Fair project was introduced by Dr. Masoud Sadjadi as one of the assigned projects for the Senior Project class in the spring of 2013. It was initially developed by a team of five students, along with the overview and guidance of Dr. Sadjadi and Juan Caraballo.

The project was reintroduced in the fall of 2013 for the current Senior Project class. Students were assigned with the task of improving on the existing application and of developing additional functionality that will aid in the process of interviewing prospective employees.

## 1.3. Definitions, Acronyms, and Abbreviations

**Definitions**

- **Student**: an individual who is currently enrolled in the School of Computing & Information Sciences FIU

- **Job:** an activity done in exchange for payment

- **Full-time:** requiring 40 hours or more hours per week

- **Part-time:** requiring less than 40 hours per week

- **Paid internship:** an internship for which a student will receive compensation

- **Unpaid internship:** an internship for which the student will not receive compensation

- **Benefits:** non-salaried compensation for employees, such as insurance, tuition reimbursement, and retirement benefits

- **Work authorization:** current legal work status of a student. Categories include U.S. Permanent Resident and U.S. Citizen

- **Grade point average:** a number out of 4.0 which gives a representation of a student’s grades in his/her classes throughout his/her college career

- **Salary:** a periodic payment made to an employee in exchange for services provided. Salaries are provided in yearly terms.

- **Résumé:** a document which describes a student’s qualifications, skills and education

- **Cover Letter:** a document which is used by students to introduce themselves to the companies that they are applying to. It usually goes together with a résumé

**Acronyms**

- **VJF**: Virtual Job Fair

- **FIU:** Florida International University

- **GPA:** Grade point average

- **SCIS:** School of Computing & Information Sciences

**Abbreviations**

As of right now, there are no abbreviations for this project.

## 1.4. Overview of document

The Feasibility Study and Project Plan covers several aspects of the Virtual Job Fair 2.0 project. In Chapter 1, general information such as problem statement, background information on this specific project and definitions is found. Chapter 2 contains the actual feasibility study, with description and limitations of the current system, and an overview of the system that will be implemented. Also, alternatives are analyzed and discussed. Moreover, in Chapter 3, project organization is detailed, with specific roles for each of the members assigned. Moreover, hardware and software requirements are specified. Chapter 4 contains the Appendix, in which miscellaneous information, such as charts and tables, are specified. Finally, Chapter 5 contains works used as references.

# 2. Feasibility Study

The feasibility study chapter explores the idea of a virtual job fair from a practical point of view. Firstly, it considers the limitations of the current system, which was the project developed last spring. Also, it explains the purpose of the Virtual Job Fair, explaining how the features of VJF will improve on current problems. Then, high-level user requirements are described. Moreover, alternatives to certain aspects of VJF are considered and analyzed, with quantitative data used to support the fact that these alternatives were not used.

## 2.1. Description of Current System (Limitations and Constraints)

The current system was implemented in the spring 2013 semester. As it is, it allows students and employers to engage in interviews through online video chats. It also allows employers to post jobs for students to browse and apply. Moreover, it offers a messaging system, through which employers and students can communicate privately. Also, the current system allows users to log in using their LinkedIn, Google or FIU account.

The current system also has standard functionality, allowing users to log in and log out, to register in the system, to edit their profiles, to change their passwords and to retrieve forgotten passwords.

**Limitations and Constraints**

As implemented, the current system has the following limitations/constraints:

**- Aimed towards FIU Computer Science students**: the scope of the system is geared towards students who are both FIU students and Computer Science majors. This leaves out two major groups of people:

a) Students who study at FIU but whose major is not Computer Science

b) College students who do not study at FIU, but at other universities instead

Therefore, it is geared toward a very narrow group of people, even when potentially any college student could benefit from this service

**- Limited interview functionality:** as implemented, the system only allows for video interviews and live chat, limiting the interaction between students and employers to a very basic level

**- Limited Document Collaboration functionality:** the current system has a very limited collaboration ability. It lacks the ability to have users of the system collaborate on documents in real-time which is a crucial part of an interview process.

**- Limited Priority for FIU Seniors:** even though the current system does not restrict any user from signing in, Priority should be given to FIU Seniors, given that this project was born from an FIU SCIS Senior course and it is has been strongly suggested by the faculty to include this feature in the system.

**- Inability to share images between students and employers:** the current system lacks an image-sharing feature which allows students and employers to exchange pictures which can enhance the interview experience

- **No drawing feature:** the current system does not have any type of drawing feature that may allow students and employers to brainstorm, exchange drawings or jot down ideas while interviewing

**- Reminder system:** the current system lacks a way of reminding students or employers of upcoming interviews

**- Users are not allowed to delete their accounts:** once registered, students and/or employees are not allowed to remove themselves from the system’s database

**-Employers are not able to contact students through other means other than by email:** The current implementation makes it very hard to keep both students and employers connected outside of it.

**-Students and employers are not reminded of important deadlines:** The current system does not have any functionality that alerts users of new events.

## 2.2. Purpose of New System

This new system will expand upon the idea of giving college students and companies an opportunity to interact with each other through virtual interviews, even if they are located remotely from each other.

The main purpose of the new system is to add functionality to the current system, which allows for virtual interviews to resemble physical interviews as much as possible. While the current system only allows for chats during video interviews, our system will add several useful features, such as screen-sharing, a text editor, a file-sharing system and a whiteboard, with all features described next.

**New System’s Features**

The following functionality will be added to the system:

**- Collaborative text editor:** students and employers will be able to simultaneously and dynamically collaborate through a shared text editor while interviewing

**- Screen-sharing:** students and employers will be able to share their computer screen with each other while interviewing

**- SMS/Email notification system:** students and employers will have the option of receiving notifications through text messages and/or emails about upcoming interviews and job postings

**- Whiteboard:** students and employers will be able draw by means of a whiteboard while interviewing, whose drawings can be shared through the real-time image sharing feature

**- Real-time document sharing:** students and employers will be able to upload and receive documents in real-time during an interview

**- Image sharing:** students and employers will be able to exchange (upload and view) images while interviewing, making the interview process more dynamic

**- Senior Project website login:** students enrolled in the Senior Project class will be allowed access to our system through FIU’s Senior Project Website

## 2.3. High-level Definition of User Requirements

**Current System’s User Requirements**

The current system…

Requires users and employers to register

Requires users and employers to validate their account

Allows users and employers to edit their profile

Allows users and employers to participate in a video interview

Allows users and employers to interact with a text chat tool

Allows students to upload a resume

Allows students to include LinkedIn profiles

Allows employers to search for candidates based on skills

Allows employers to view candidate profiles

Allows employers to send messages candidates

Requires Administrators to validate employers

Requires user name and password to log in

Allows users to reset forgotten passwords if validation challenge is successful

Requires login to view user profiles

Hashes and salts passwords prior to storing in database

Sanitizes SQL queries to prevent SQL injections

**New System’s User Requirements:**

The new system shall…

Allow users to create a new shared document.

Allow students and employers to start using the whiteboard functionality

Allow students and employers to upload an image to share during an interview

Allow students to view images uploaded by the other party in an interview

Allow students and employers show or restore a whiteboard session

Allow students and employers to select an image to upload to the server for sharing purposes

Allow students and employers to draw using the whiteboard

Allow students and employers to change the color of the drawing pencil tool

Allow students and employers to type text into the whiteboard

Allow students and employers to clear the drawings of the whiteboard

Allow students and employers to partially erase drawings from the whiteboard

Allow users to create a new document.

Allow users to invite another user to a shared document.

Allow users to delete a shared document.

Allow users to import a document.

Allow users to export a document.

Allow users to rename a document.

Allow users to save a shared document.

Maintain access boundaries between non-collaborating accounts.

Allow FIU Computer Science Seniors to login using their FIU SCIS credentials.

Allow students and employers to share their screens

Allow student and employers to view each other’s screen.

Allows employers to contact students through SMS

Allows students and employers to receive SMS notifications

Allow student and employers to confirm their phone numbers through SMS validation.

# 2.4. Alternative Solutions

## 2.4.1. Description of Alternatives

Below, alternative implementations for this project are mentioned and discussed:

**New System’s Features Alternatives**

**Collaborative Text Editor**

**Alternative 1**

Make use of the Google Drive API ( https://developers.google.com/drive/ ) in order to implement via their API some of the collaborative editing features required, and extend the features this solution does not provide, which are essential for the project.

**Alternative 2**

Make use of the Etherpad Collaborative Editor ( http://etherpad.org/ ) in order to provide some of the collaborative editing features required, and extend the features this solution does not provide, which are essential for the project.

**Alternative 3**

Make use of the Zoho Editor API, specifically the Zoho Remote API ( https://apihelp.wiki.zoho.com/) in order to implement via their API some of the collaborative editing features required, and extend the features this solution does not provide, which are essential for the project.

**Whiteboard Feature**

**Alternative 1**

In the case that the original whiteboard becomes unfeasible to implement, if time permits, integrate a different online whiteboard, such as Scriblink (http://www.scriblink.com). This might require learning a new API and completely changing the implementation, use cases and test cases. For this reason, this would only be considered if sufficient time is available.

**Alternative 2**

In the case of a problem with the whiteboard API calls or that there is no time for the first alternative, integrate a single, non-shared whiteboard for each user to allow them to draw during an interview. Then, also implement an image-sharing system which allows users to upload images to the system (including whiteboard drawings) to allow the other party in the interview to view the images.

**Blocking Feature**

**Alternative 1**

In the case the blocking feature becomes unfeasible, since it is a minor feature, the feature will be scraped from the project in order to allow for resources to be directed to the major features of the project.

**Screen Sharing Feature**

In the case that the screenleap is unreliable or unsuitable for the project, we would focus our attention on the screen sharing product developed by easyRTC. In the case that the screen sharing functionality become unfeasible a simpler alternative could be implemented such as one where only employers are able to share their screens.

**SMS messaging functionality**

In case that the twilio api is too complicated to implement or prove to be unreliable then we could change to a different service provider such as clockwork which also provides plenty of documentation and customer support. In the case where we lack time to implement all features, we could eventually scrap the notification functionality.

**Environment Software Suite Alternatives**

**Alternative 1**

Our current implementation strategy, which involves a LAMP stack.

**Alternative 2**

For the second alternative, instead of using the open source solution (LAMP Stack), we would implement the system using a closed source solution (.NET framework, IIS).

**Alternative 3**

For the third alternative, instead of using the open source solution (LAMP stack), we would implement the system using a different open source solution (Tomcat stack)

## 2.4.2. Selection Criteria

The criteria that we used for the consideration of the environment software suite alternatives are operational feasibility, technical feasibility, organizational feasibility, and economic feasibility. Each of these criteria is described below:

● **Operational Feasibility**

Deals with the ability of the users, developers and those involved with the project to use and support the proposed system.

● **Technical Feasibility**

Deals with the reliability of the software and hardware and its capability to provide the intended functionality of the system

● **Organizational Feasibility**

Deals with the system’s ability to support the goals of the organization

● **Economic Feasibility**

Deals with the ability of the system to cover its development and maintenance costs after its completion

## 2.4.3. Analysis of Alternatives

**New System Feature Analysis**

**Collaborative Text Editor**

The following section contains analysis of the Collaborative Text Editor feature alternatives that were proposed on 09/09/13 and which have been revised at several points throughout the lifetime of the project.

**Alternative 1**

Google Drive API: After careful analysis and reevaluation of this alternative, we have concluded that the restrictive nature of this solution fails to provide the simplicity and integration necessary for the end user to be able to interact with the feature, which is one of the main goals of the project. The reasons for this are:

1. **Google Drive API**: Provides no means other than to have a Google Administrator Account ( Google Apps for Business ) to dynamically create, delete and manage users. Which would be required in order to dynamically provide a Virtual Job Fair user with a Google account in order to make use of the Google Collaborative Editor ( Implemented via the API ) This solution was discarded for The following Reasons:
2. **Google Administrator Account** ( Google Apps for Business ) has a cost of $5.00/user/month which proves extremely cost prohibitive for a Senior Project, as well as being unscalable. As the Virtual Job Fair system grows in users. The cost becomes, again, extremely high.
3. **Google Drive API:** Requires users to have a Google account. This problem was suggested to be overcome by creating a pool of Google user accounts. One of these would be selected for a Virtual Job Fair user at the time of login. This way that the Virtual Job Fair user could make use of the Google Collaborative Editor ( Implemented via the API ) This solution was discarded for The following Reasons:
4. Unmanageable/Unscalable as the Virtual Job Fair system grows in users.
5. Violates Google’s code of service.
6. Very high risk of having the pool of accounts ( or a subset of ) be marked as inactive and therefore deleted.

**Alternative 2**

1. **Etherpad**: This alternative was given initial extensive consideration, as it provides a simple solution that has a high capability to be integrated with the system. However, upon further examination, it was decided against for the following reasons:

1. Relatively new, which is evidenced by lack of robustness and feature set, compared to the other alternatives.
2. Lack of Security features. Documents created by etherpad can easily be shared between users via a single URL, giving potentially anyone the possibility of viewing a document. This represents a security concern for Virtual Job Fair users, given the delicate nature of the information shared.

**Alternative 3**

**1. Zoho Docs API:** After careful analysis of all the alternatives for implementing the Collaborative Text Editor feature, we have ascertained that Alternative #3 ( our current implementation ) is the one best aligned with the goals of the project. It is the most robust, reliable, feature rich, and security oriented of all the alternatives examined. Reasons for choosing this alternative are ( among others )

1. Seasoned, robust and reliable implementation, with a mature API which has been available for years.
2. Feature Rich, given that Zoho Docs provides 2 different API’s in order to interact and implement their features/service.
3. Highly manageable, given that the API imposes no restriction with regards to requiring a user to have a Zoho account to interact with the editor.
4. Highly Scalable, given that the API imposes no restrictions on the amount of simultaneous users supported.
5. Security oriented, given that one of the API’s ( the one chosen for our implementation ) requires documents to be hosted on the Virtual Job Fair servers directly.
6. Security oriented, given that the API does not allow users that are not specifically approved to interact with a shared document to view or edit them.

**Whiteboard Feature - Final Outcome (as of 11/25/2013)**

Two weeks before the implementation phase was to end, we noticed that the calls to the API of A Web Whiteboard were extremely unreliable. In fact, in average, 1 out of 50 calls to API methods were successful. After careful deliberation, and after weighing both alternatives to the whiteboard implementation, we decided to go for alternative 2.

The main reason for this was the time constraint that comes with only having two weeks to start an implementation from scratch. We believe that 2 weeks is not enough time to learn a new whiteboard system, integrate into the system and test. Moreover, nothing prevents this new system from failing as well.

For that reason, alternative 2 was taken. This requires creating several methods in PHP and JavaScript, of creating upload/view buttons with HTML and CSS, and of using AJAX calls and SQL in order to retrieve URLs of images uploaded into the system. Also, it requires file upload functionality with PHP.

**Blocking Feature - Final Outcome (as of 11/25/2013)**

As described in the whiteboard feature section, given the fact that API calls became unreliable, an alternative to the whiteboard had to be developed. For that reason, resources were directed towards the new implementation of the whiteboard (a major feature), instead of to the blocking feature (a minor feature). At this point, the blocking feature was scraped from the project in order to develop, test and document the alternate solution to the original real-time whiteboard.

**Screen Share Feature**

After multiple testing and debugging of the easyRTC screen sharing tool, we have decided to go ahead and focus our attentions onto the ScreenLeap service. ScreenLeap seems to be a better alternative since all the media streaming takes place between the service provider and the user, there is no need to have a powerful environment that can handle all the bandwidth necessary. By using ScreenLeap we will be able to future proof our system for multiple users and concurrent interviews.

**SMS Feature**

Through various discussion and careful deliberation we have made the final decision between clockwork API and the Twilio. The Twilio service has a better infrastructure and plenty of documentation; additionally we have found the customer service to be unmatchable. The benefits of a 24/7 customer service team can prove to be of great use for the development of this functionality.

**Environment Software Suite Analysis**

After careful analysis of all alternatives, we have ascertained that Alternative #2 (our current implementation) presents a more cohesive and well-supported solution than Alternative #3. It suffers from scalability problems given the nature of it being a closed-source, proprietary, and expensive software solution.

On the other hand, while Alternative #3 does not suffer from these problems, given the fact that it is open-sourced (like our current implementation), it does not present any additional benefits. Moreover, it represents a technical challenge to our developers given the fact they are not familiar with the stack, incurring in higher costs, deviations from the schedule, and an overall less efficient system.

Please refer to Appendix 2 for a feasibility matrix, with each alternative scored by different aspects.

## 2.5. Recommendations

As seen in the feasibility matrix, for the environment suite, our original alternative had the highest score out of all three alternatives. Moreover, our developers have a strong familiarity with the LAMP stack, which will allow for the efficient coding of solutions. Given its open-source nature, our familiarity with it, and high score in our feasibility matrix, we decided to use the LAMP stack for our project.

# 3. Project Plan

The project plan chapter introduces VJF from a project management perspective. Firstly, the project organization is described, with the roles for each member listed. Then, hardware and software requirements for the development of the project will be listed. After that, milestones, tasks, and deliverables will be listed.

## 3.1. Project Organization

### 3.1.1. Project Personnel Organization

|  |  |  |
| --- | --- | --- |
| **Team Member** | **Primary Task** | **General Task** |
| Jorge Fernandez | Front End Developer  Tester  Timekeeper | Additional shared tasks |
| Luis Irizarry | Team Leader  Developer  Database Manager | Additional shared tasks |
| Luis Benjumea | Back End Developer  Configuration Manager  Document Editor | Additional shared tasks |

### 3.1.2. Hardware and Software Resources

**Hardware**

In order to start developing the project, our team will need computers with at least the following

specifications:

**- Processing Power:** Pentium IV 2.0 GHz processor or better

**- RAM Memory:** 1GB 133MHz SDRAM

**- Available space on hard drive:** 5GB

**Other Devices**

- **Input devices**

a) Standard wired/wireless K120 keyboard

b) Standard wired/wireless trackball/optical mouse

- **Output devices**

a) Standard VGA/DVI/HDMI monitor display

**Software**

**1) Google Chrome 30.8:** last, most updated version of the Chrome browser that will be used to test Virtual Job Fair

**2) StarUML:** UML software platform that will be used to create diagrams for the document

**3) Yii Framework 1.1.14:** last, most updated version of Yii Framework, an MVC-based, PHP framework used for development. It will be used to develop the front-end and back-end of Virtual Job Fair

**4) phpMyAdmin:** a DBMS (integrated into Yii) that will be used to manually manipulate the database when necessary

**5) Adobe Dreamweaver (IDE):** software platform for front-end design that will be used to create backbone of the user interface

**6)** **VMWare:** virtual machine software that will be used for the deployment of the software

## 3.2. Identification of Tasks, Milestones and Deliverables (work breakdown)

Below is a list of all different tasks, milestones, and deliverables for the project:

**Tasks**

Requirement Elicitation

Requirement Analysis

Framework Setup

Deliverable 1 (Feasibility Study and Project Plan)

Database Design

Database Implementation

System Design

Deliverable 2 (Requirements Document)

Object Design

Deliverable 3 (Design Document)

System Implementation

Test Case Design

Test Case Implementation

Integration and System Testing

Deliverable 4 (Final Deliverable)

Documentation

Project Deployment

**Milestones**

Analysis Milestone

Design Milestone

Testing Milestone

Documentation Milestone

**Deliverables**

- **Deliverable #1 (Feasibility Study & Plan):** September 9th, 2013

**- Deliverable #2 (Requirements Document):** September 23rd, 2013

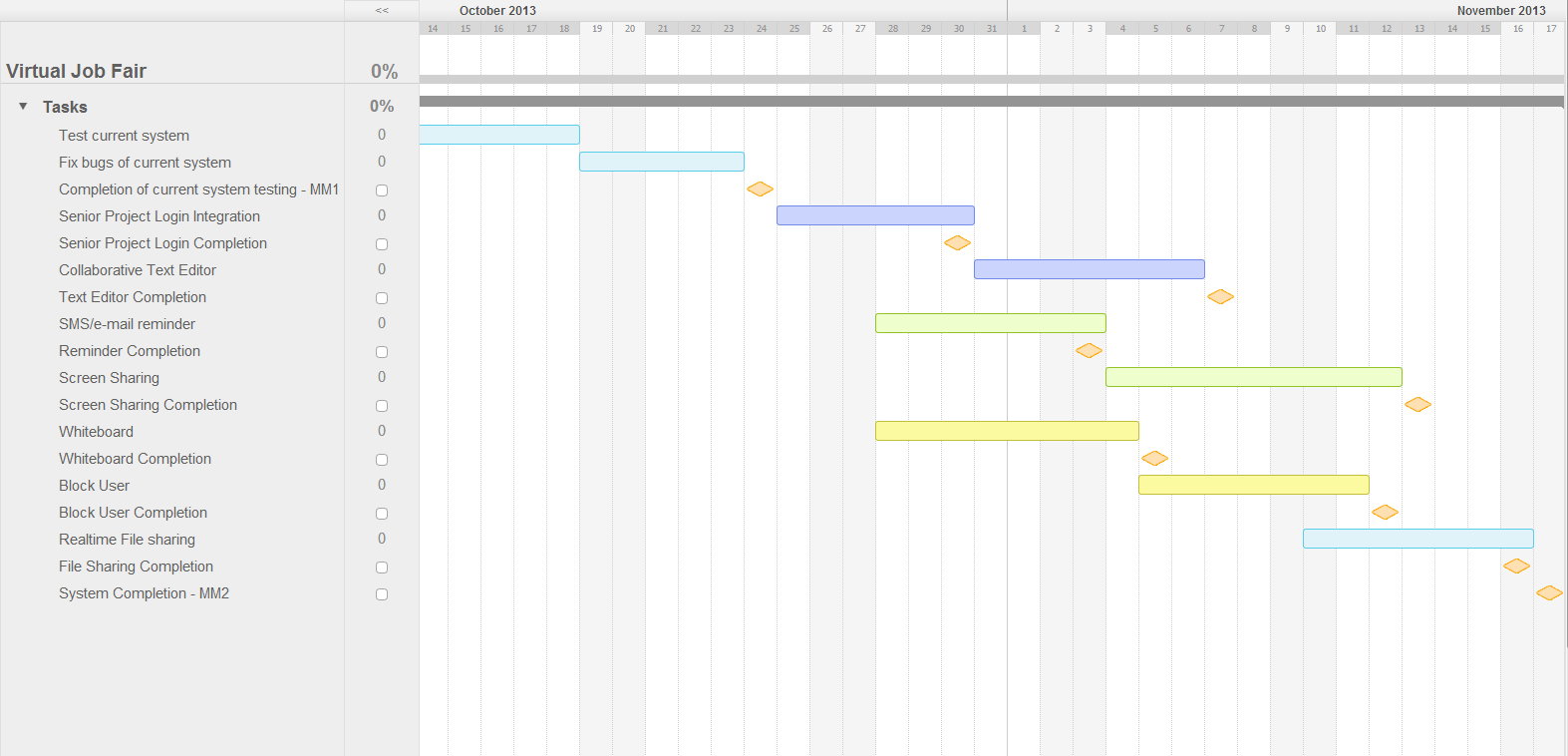
**- Deliverable #3 (Design Document):** October 7th, 2013

**- Deliverable #4 (Final Deliverable):** December 9th, 2013

# 4. Appendix

The Appendix chapter will introduce four important aspects of the program. First, a Gantt chart, with the schedule for the work of the project is presented. Then, a feasibility matrix, with scores for the alternative implementations, is shown. Thirdly, a cost matrix, which estimates the total cost for the project, is shown. Finally, a diary of meetings presents information about group meetings.

## 4.1. Appendix A - Project schedule (Gantt chart or PERT Chart)



## 4.2. Appendix B – Feasibility Matrix

**Collaborative Text Editor**

|  |  |  |  |
| --- | --- | --- | --- |
| **Selection Criteria** | **Alternative 1**  **( Google )** | **Alternative 2**  **( Etherpad )** | **Alternative 3**  **( Zoho )** |
| **Operational** | 1.0 | 3.0 | 3.8 |
| **Technical** | 2.5 | 3.2 | 3.8 |
| **Organizational** | 2.5 | 3.2 | 4.0 |
| **Economic** | 1.0 | 4.0 | 4.0 |
|  | **Average:** 1.75 | **Average:** 3.35 | **Average:** 3.9 |

**SMS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Selection Criteria** | **Alternative 1**  **( Twilio)** | **Alternative 2**  **( Clockwork )** | **Alternative 3**  **( Nexmo )** |
| **Operational** | 3 | 2 | 2 |
| **Technical** | 3 | 3 | 3 |
| **Organizational** | 4 | 2 | 1 |
| **Economic** | 2 | 3 | 3 |
|  | **Average:** 3 | **Average:** 2.5 | **Average:** 2.25 |

**ScreenShare**

|  |  |  |  |
| --- | --- | --- | --- |
| **Selection Criteria** | **Alternative 1**  **( EasyRTC)** | **Alternative 2**  **( ScreenLeap)** | **Alternative 3**  **(** [**red5**](https://code.google.com/p/red5-screenshare/) **)** |
| **Operational** | 2 | 3 | 2 |
| **Technical** | 2 | 4 | 1 |
| **Organizational** | 3 | 2 | 1 |
| **Economic** | 3 | 5 | 5 |
|  | **Average:** 2.75 | **Average:** 3.5 | **Average:** 2.25 |

**Whiteboard**

|  |  |  |
| --- | --- | --- |
| **Selection Criteria** | **Alternative 1**  **(ScribLink)** | **Alternative 2**  **(Image-sharing)** |
| **Operational** | 2.5 | 4.8 |
| **Technical** | 1.2 | 3.6 |
| **Organizational** | 4.2 | 3.2 |
| **Economic** | 4.9 | 5.0 |
|  | **Average:** 3.2 | **Average:** 4.15 |

**Environment Software Suite**

|  |  |  |  |
| --- | --- | --- | --- |
| **Selection Criteria** | **Alternative 1** | **Alternative 2** | **Alternative 3** |
| **Operational** | 4.0 | 4.0 | 2.8 |
| **Technical** | 4.2 | 4.0 | 3.0 |
| **Organizational** | 3.8 | 2.5 | 3.0 |
| **Economic** | 4.5 | 2.0 | 4.0 |
|  | **Average:** 4.12 | **Average:** 3.1 | **Average:** 3.2 |

## 

## 4.3. Appendix C – Cost Matrix

|  |  |
| --- | --- |
| **Item** | **Item Cost** |
| Yii Framework | $0.00 |
| Twitter Bootstrap | $0.00 |
| Easy RTC | $0.00 |
| Shared Whiteboard | $120.00 |
| Hardware | $1200.00 |
| Development | $0.00 |
| Testing | $0.00 |
| Contingencies | $260.00 (~20% of total cost) |
|  | **Total:**$1570.00 |

## 4.4. Appendix D - Diary of Meetings

**Project:** Virtual Job Fair

**Date:** Friday, September 6th, 2013

**Start Time:** 7:00PM

**End Time:** 10:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:** Start creating an overview of the project and call our mentor, Mr. Caraballo, to discuss specific issues about the project

Assigned Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Set up Yii framework to review the spring 2013 project | Create a list with information and to-do items based on Mr. Caraballo’s questions; review the documentation of the old project | Work on the definitions, acronyms, and abbreviations section of the Deliverable | Called Mr. Caraballo and asked project-specific questions |

**Project:** Virtual Job Fair

**Date:** Saturday, September 7th, 2013

**Start Time:** 9:00AM

**End Time:** 2:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:** Based on brainstorming and information gathered from Mr. Caraballo, clearly define the purpose of the new system when compared to the current system. Also, keep working on the first deliverable, which is due on Monday, September 9th, 2013.

Assigned Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Watch tutorials on the Yii framework; statically analyze the old group’s project to better understand that group’s implementation | Put the agreed-upon problem definition into words and complete the high-level requirements | Work on the diary of meetings and research free tools to create GANTT charts | Keep working on Deliverable #1 as a group. Also, define specific roles for each member of the group |

**Project:** Virtual Job Fair

**Date:** Sunday, September 8th, 2013

**Start Time:** 10:30AM

**End Time:** 7:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:** Finish setting up the framework in which to run the old group’s project, complete the Feasibility Study and Plan, and do the PowerPoint presentation for tomorrow

Assigned Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Check the old project’s code thoroughly and change absolute paths to match that of our framework; work on the cost matrix; create GANTT chart with project schedule information | Determine a rating scale and assign values to alternatives for the feasibility matrix; list the tasks, milestones, and deliverables to be used as reference for the GANTT chart | Introduce each chapter briefly; format the document for it to have a consistent look and feel; detail hardware and software requirements | Finish the first deliverable and brainstorm for the presentations that are due on Monday, September 10th, 2013 |

**Project:** Virtual Job Fair

**Date:** Sunday, September 10th, 2013

**Start Time:** 8:00PM

**End Time:** 10:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:** Set up the virtual machine that was provided by SCIS and install everything all the software that will be needed

Assigned Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Research different software packages and APIs for integration into the project | Set up the LAMP environment that will be used for development and testing in the virtual machine | Create a document that contains the proposed functionality of the system to discuss with our mentor and our instructor | Set up the virtual machine as soon as possible in order to start developing and adding features |

**Project:** Virtual Job Fair

**Date:** Wednesday, September 11th, 2013

**Start Time:** 7:00PM

**End Time:** 11:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:**

Assigned Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Review the existing code in order to get the video interview system working | Replace old paths from existing code to point our current virtual machine for interview process | Review the existing code in order to get the video interview system working | Set up the video interview system from the old’s project so it works on our virtual machine |

**Project:** Virtual Job Fair

**Date:** Saturday, September 14th, 2013

**Start Time:** 2:00PM

**End Time:** 4:30PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:**

Assigned Tasks:

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Plan GANTT chart for the whole project based on new schedule | Lead the selection of features of the system that will be implemented | Modify current system section of Deliverable #1 to reflect the project done in spring 2013 | Advance on Deliverable #1 |

**Project:** Virtual Job Fair

**Date:** Sunday, September 15th, 2013

**Start Time:** 2:00PM

**End Time:** 6:00PM

**In Attendance:** Jorge Fernandez, Luis Benjumea, Luis Irizarry

**Late:** None

**Agenda:**

Assigned Tasks:

|  |  |  |  |
| --- | --- | --- | --- |
| **Jorge F.** | **Luis B.** | **Luis I.** | **Group** |
| Redo individual GANTT charts for the presentation, according to a new schedule | Formalize the features of the new system | Edit the features of the new system and add them to the document, each with a description | Finish Deliverable #1 and individual presentations for resubmission |

# 5. References

The References chapter has references to external documents that have been used in this document.

Bhushan Agarwal, Bharat. *Software Engineering*. 2nd ed. New Delhi: Firewal Media, 2009. Print.