**Feasibility Study and Project Plan**

CIS 4911 – Senior Project

**Virtual Job Fair 5.0**

Members:

**Rogelio Alonso**

Instructor:

**Masoud Sadjadi**

Mentor:

**Juan Caraballo**

Florida International University

Copyright © Florida International University 2015. All Rights Reserved. No part of the Virtual Job Fair Project or documentation may be reproduced or modified without the express consent of Florida International University. Redistribution or commercial use is strictly prohibited.

**ABSTRACT**

The Feasibility Study and Project Plan document gives an introduction to the Virtual Job Fair 5.0 System. Chapter 1 gives basic information about the Virtual Job Fair 5.0, 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 for the project, such as personnel organization, hardware and software resources used, and a list of tasks, milestones, and deliverables. Chapter 4, Appendix, contains miscellaneous charts and information, such as a Mingle board with the project sprints, a feasibility matrix, a cost matrix, and a diary of meetings. Finally, Chapter 5 contains references to external documents that have been used for orientation.

Table of Contents

[1. Introduction 3](#_Toc417474457)

[1.1-Problem definition 3](#_Toc417474459)

[1.2-Background 4](#_Toc417474460)

[1.3-Definitions, Acronyms, and Abbreviations 4](#_Toc417474461)

[1.4-Overview of document 5](#_Toc417474462)

[2. Feasibility Study 6](#_Toc417474463)

[2.1-Description of Current System (Limitations and Constraints) 6](#_Toc417474464)

[2.2-Purpose of New System 8](#_Toc417474465)

[2.3-High-level Definition of User Requirements (must include security/privacy requirements) 10](#_Toc417474466)

[2.4- Alternative Solutions 15](#_Toc417474467)

[2.4.1-Description of Alternatives 15](#_Toc417474468)

[2.4.2-Selection Criteria (Briefly describe the feasibility criteria used in the analysis component) 16](#_Toc417474469)

[2.5-Recommendations 17](#_Toc417474470)

[3. Project Plan 18](#_Toc417474471)

[3.1-Project Organization 19](#_Toc417474472)

[3.1.1-Project Personnel Organization 20](#_Toc417474473)

[3.1.2-Hardware and Software Resources 20](#_Toc417474474)

[3.2-Identification of Tasks, Milestones and Sprints (work breakdown) 22](#_Toc417474475)

[4. Appendix 24](#_Toc417474476)

[4.1-Appendix A - Project schedule (Gantt chart or PERT Chart) 24](#_Toc417474477)

[24](#_Toc417474478)

[4.2-Appendix B – Feasibility Matrix 24](#_Toc417474479)

[4.3-Appendix C – Cost Matrix 25](#_Toc417474480)

[4.4-Appendix D - Diary of Meetings 26](#_Toc417474481)

[5. References 30](#_Toc417474482)

# 1. Introduction

# This introductory chapter gives some background information about the Virtual Job Fair v5.0 system. This chapter will talk about the problem that companies are facing as well some background on this problem. It will discuss the previously designed Virtual Job Fair website and its purpose. Moreover this chapter will define and explain the definitions, acronyms and abbreviations of terms that will be used later in this deliverable. 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, will be to provide FIU Computer Science students with a user-friendly interface where students will be able to get job matches from different job search sites, and not just from the employers who register in the VJF site. This way the students do not need to go looking in different sites, and he or she can find everything on our site. Also students will receive notification of jobs matching his/her saved search criteria, so that way the students will know as soon as an opportunity is available. We will also provide a way for employers to search for specific skills on the students, as well as save queries of their own which they can be notified according to whichever time they want. Therefore providing the employer and potential employee a more easy and friendly way to find their match. Moreover, we will grant access to any visitor as an Employer or a Student Guest with limited functionality.

## 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. Then the project was continue in the fall of 2013 by another group that 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.

Every semester now students are assigned with the task of improving or providing a new features that will greatly benefit the student’ and employer user experience in the VJF website. In addition, improve the way that the system communicates with employers and students.

## 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

## 1.4-Overview of document

The Feasibility Study and Project Plan covers several aspects of the Virtual Job Fair 5.0 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 fall and improve on spring 2015. 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 modified in the spring 2014. As it is, it allows students to search for jobs, and get emails with jobs based on their skills. The current system also allows employers to post jobs for students to browse and apply. Furthermore, it offers a messaging system, through which employers and students can communicate privately. It also allows users to save their search queries as well as lets them get a notification with the frequency defined by the student. Additionally, employers who have account on the system can save queries and search for students based on skill sets. Finally, the administrator actor is provided with a dashboard displaying useful statistics, and can create user accounts from the administrator menu.

The current system also has standard functionality, allowing users to login and logout, 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. However, any Computer Science student can greatly benefit from this site.

**- Employer limitation:** the systems lacks a way to connect a newly registered employer account waiting for account revision and activation. The registration flow for the employer user ends due to the need of an admin monitoring new accounts and granting access to it.

**- Guests limitation:** the current system does not allow visitors, either for employers or students, therefore and account must be created at all cases.

- **Inability to students to update resumes:** the current system only provides a way to upload a PDF/Video resume; but, does not allow to replace them and update them.

**- Students search for job is defective:** The current system boolean search results include unwanted keywords, and is unable to combine different types of search criteria.

**- Student job email notification based on skills:** student will only get notified of jobs matching their skills.

**- Job posting limited to registered employers:** job posting are only available from registered employers only.

-**Creation of account for administrator:** the current system does not allow creating of new account from the administrators account.

- **Limited admin API management:** the current system lacks to allow administrators to control all aspects of the implemented VJF API through an intuitive interface. (Improved Fall)

**- Limited interview functionality:** the system lacks 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.

**- 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.

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

**- The system does not count with a regression testing script:** the current system does not provide a way to test if existent functionalities were affected by new ones.

## 2.2-Purpose of New System

Given the fact that not all employers have the financial or the time capabilities to be registering on every website to seek for potential candidates in different locations, and students also don’t have the time to look through dozens of job sites. Also, given that current solution provided by universities is less than ideal.

The new version of VJF will allow Guest employers authentication and allow them to post jobs and have limited functionality within the system. Additionally, Guest employers will be able to search for students based on skillsets and look at their profile. Similarly, the system will allow Guest students to search for jobs and feel the web site with limited functionality.

As in previous versions, it will provide students with an easy to use interface where they will be able to get job matches from different job search sites, and not just from the registered employer in the VJF site. This way the students don’t need to go looking in different sites, and he or she can find numerous job postings on our site. The registered employers will also be able to store their queries and receive notifications.

**New System’s Features**

The following functionality will be added to the system:

**Guest Employer Account:** Provide a way for employers who does not own an account to check the system, post jobs and search for local talent.

**Guest Student Account:** Provide a way for student who does not own an account to check the system and search for jobs.

**Update Key Document from the Student Profile:** provide a way for students to be able to update and replace their video/PDF resume as well as their profile picture.

**Developers Regression Testing**: provide a way for developers to be able to test if newly develop stories conflict or damaged existent functionality for the student actor by running a regression testing script.

**Search Engine:** provide a way to future developers to use a search engine capabilities.

## 2.3-High-level Definition of User Requirements (must include security/privacy 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

Allow students to upload a resume and video resume

Allows users and employers to interact with a text chat tool

Allows students to include LinkedIn profiles

Allow students and employers to upload an image for their profile

Allow students to associate skills to their profile

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

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

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

Allow FIU student to login using their FIU credentials

Allow student to login using their Google credentials

Allow student to login using their LinkedIn credentials

Allow students to search for jobs based on skills, company name, job type, and position on navigation bar.

Allow students to search for jobs based on skills, company name, job type, position, and location on the advanced search.

Allow students to search for jobs based on skills, company name, job type, position, and location on the advanced search.

Allow job search results from Indeed.com.

Allow job search results from CareerBuilder.com.

Allow students to receive email notification with expanded job search results.

Prompt student to enter name for query to be save.

Allow students to save queries to their profiles.

Allow students to active / deactivate saved queries.

Allow students to delete saved queries.

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

Allow FIU student to login using their FIU credentials.

Allow students to link their third party accounts into one

Allow students to choose between their current information and the information coming in from their third party accounts when linking accounts.

Guide the students to recover his or her password; when trying to register with an e-mail that is already in the system.

Allows external sources (SCIS CareerPath) to push job postings into the VJF system.

Allow administrators to control all aspects of the implemented VJF API through an intuitive interface.

Provide an administrative interface to bulk import jobs from the FIU SCIS CareerPath system, using a provided CareerPath API end-point.

Allow administrators to maintain the system’s job skills database.

Allow an interface for administrators to manage users.

Allow an interface for administrators to manage job postings.

Allow the administrator to manage the notification system.

Allow students to enable/disable if he/she is looking for jobs.

Allow admin users to enable/disable notifications globally.

Allow students to receive jobs notification based on saved custom job search queries to third party job websites.

Allow students to receive jobs notification based on their skill set.

Allow employers to receive notification of students matching job posting description.

Allow employers to provide a way for employers who have account on the system to save queries.

Allow the administrators to create accounts from administration menu.

Allow users to set custom time intervals for notifications, not predefined ones.

Allow the administrator to see a dashboard with site statistics. How many jobs active, posted, total, students active.

Allow all users to run saved search queries straight from the advanced search form, so the user doesn’t have to type the query again.

Retrieve search results (jobs postings) from StackOverflow.com

Retrieve search results (jobs postings) from Monster.com

Retrieve search results (jobs postings) from GitHubJobs.com

Allow employer navigation search bar return more precise results.

**New System’s User Requirements:**

The new system shall…

Allow the student a more reliable experience when using the system.

Allow the employer a more reliable experience when using the system.

Allow the admin a more reliable experience when using the system.

Allow guest student users to search for jobs as an authenticated user.

Allow guest employers to post jobs and search for students with specific skillsets.

Allow future developers to test their code by running an automated regression test script.

Allow students to change their profile picture.

Allow students to replace their PDF resume.

Allow students to replace their video resume.

Allow students to post video resume of at most 80 MB.

Allow future developers the use and capabilities of Solr search engine.

## 2.4- Alternative Solutions

Below, alternative implementations for the newly developed functionalities are mentioned and discussed.

### 2.4.1-Description of Alternatives

**New System’s Features Alternatives:**

* **Guest Employer Account**

**Alternative 1**

Make use of existent user type database table (MySQL)

**Alternative 2**

Make use of sessions by creating cookies to be enable in the browser

* **Guest Student Account**

**Alternative 1**

Make use of existent user type database table (MySQL)

**Alternative 2**

Make use of sessions by creating cookies to be enable in the browser

* **Update Key Documents from the Student Profile**

**Alternative 1**

Make algorithms that allows for the replacement of existing documents while deleting the previous ones. (JavaScript & PHP)

* **Developers Regression Testing**

**Alternative 1**

Make use IBM Rational Functional Tester.

**Alternative 2**

Make use Selenium IDE

* **Search Engine**

**Alternative 1**

Sphinx Search Engine.

**Alternative 2**

Solr Search Engine.

### 2.4.2-Selection Criteria (Briefly describe the feasibility criteria used in the analysis component)

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

## 2.5-Recommendations

**New System Feature Analysis**

The following section contains analysis of the new features to be included in the VJF system:

* **Guest Employer Account**

**Alternative 1 -** Make use of existent user type database table (MySQL)

This alternative have been selected because not all the browsers may have the cookies enable; hence, not all the user may benefit from this functionality. Additionally, it will be a more elegant solution, due to at some point we may need to know the quantity of the user types accessing our system.

**Guest Student Account**

**Alternative 1 -** Make use of existent user type database table (MySQL)

This alternative have been selected because not all the browsers may have the cookies enable; hence, not all the user may benefit from this functionality. Additionally, it will be a more elegant solution, due to at some point we may need to know the quantity of the user types accessing our system.

* **Update Key Documents from the Student Profile**

**Alternative 1** - Make algorithms that allows the replacement of existing documents while deleting the previous ones. (JavaScript & PHP)

* **Developers Regression Testing**

**Alternative 2** - Make use Selenium IDE

This alternative was chosen based on time constraints, even though it provides a less robust script, it does provides all the means needed to do system testing for the VJF project.

* **Search Engine**

**Alternative 2 -** Solr Search Engine

This alternative was mainly chosen because it did not needed Client API or Server API to communicate. Also, re-indexing, faceting and weight were key features that we need to enrich the search experience.

# 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

For this particular version of the project I will be adding some functionalities and stability fixes to the Virtual Job Fair that will show my skills as computer scientist.

I, Rogelio Alonso, will be responsible for gathering the stories from the product owner, refine those stories into tasks and plan 5 sprints of 10 days each. Each sprint after the stories are refined, I would make the design and implement, test and integrate back to the development server. Below is brake down of the work done in each sprint:

* Sprint 1:
* Add two new actors to the system. (Guest Employer and Guest Student)
* Sprint 2:
* Test all the student, employer actor user stories while providing an automated regression testing script.
* Sprint 3:
  + Allow student user to update/replace his video resume, PDF resume and profile picture. Increased resume video size limit to 80 MB. Provide more system stability to the following sections of the project:
    - Importing Linked In profile picture.
    - Change password functionality validation.
    - Profile page visualization.
    - Student registration functionality validation.
* Sprint 4:
  + Conduct a Feasibility Study to include and integrate a search engine with the system. Provide more system stability to the following sections of the project:
    - Editing the student/employer basic info section.
    - Deleting student/employer users from the admin section.
    - Messaging system.
    - Search jobs.
    - Visibility of key GUI buttons.
* Sprint 5:
  + Install, configure and Index data for Solr search engine. Provide more system stability to the following sections of the project:
    - Indeed API.

### 3.1.1-Project Personnel Organization

|  |  |  |
| --- | --- | --- |
| Team Member | Primary Task | General Task |
| Rogelio Alonso | SCRUM MASTER / Developer / Tester | Sprint Planning / Design / Documentation / Implementation / Testing |

### 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) PhpStorm (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.

**7)** **NetBeans (IDE)**: software that will be used to implement logical aspect of the project

**8)** **WAMP/XAMP** server: server to host locally a project.

**9)** **Solr** server 5.1.0: server hosting the search engine.

**10)** **Mozilla Firefox** 37.0.1: last, most updated version of the Mozilla browser that will be used to test Virtual Job Fair.

**11) Putty or other SSH client**: to connect to the Development and production Servers.

12) **Microsoft Office Suite**: to properly update Documentation.

**13) Selenium IDE Plug in 2.8.0**: a Mozilla Firefox plug in to run the automated test cases.

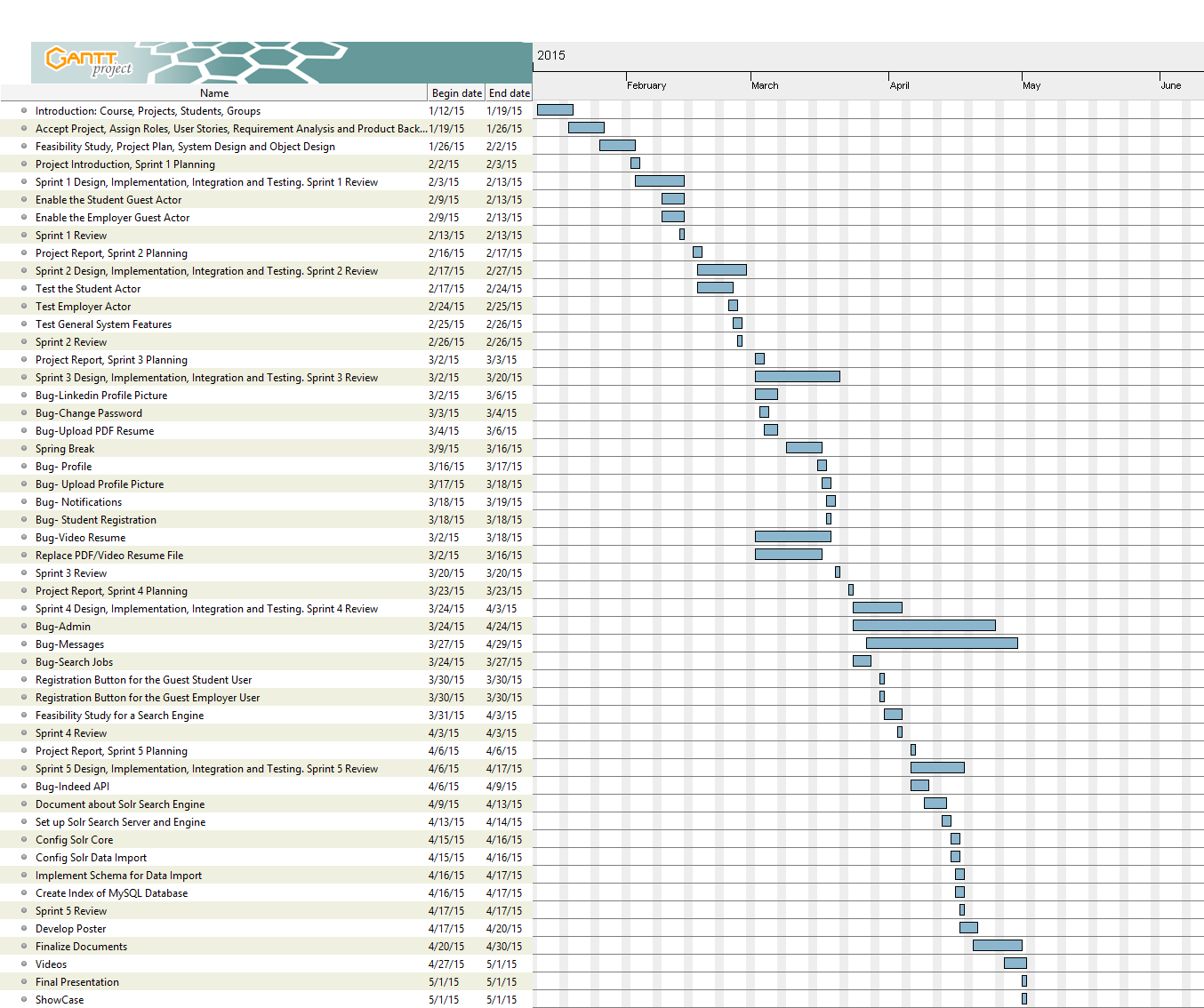
## 3.2-Identification of Tasks, Milestones and Sprints (work breakdown)

|  |  |  |
| --- | --- | --- |
| Week 1 | 1/12/15 | Introduction: Course, Projects, Students, Groups |
| Week 2 | 1/19/15 | Accept Project, Assign Roles, User Stories, Requirement Analysis and Product Backlog |
| Week 3 | 1/26/15 | Feasibility Study, Project Plan, System Design and Object Design |
| Week 4 | 2/2/15 | Project Introduction, Sprint 1 Planning, Implementation and Testing |
| Week 5 | 2/9/15 | Project Introduction, Sprint 1 Integration and Testing. Sprint 1 Review |
| Week 6 | 2/16/15 | Project Report, Sprint 2 Planning, Implementation and Testing |
| Week 7 | 2/23/15 | Project Report, Sprint 2 Integration and Testing. Sprint 2 Review |
| Week 8 | 3/2/15 | Project Report, Sprint 3 Planning, Implementation and Testing |
| Week 9 | 3/9/15 | Spring Break |
| Week 10 | 3/16/15 | Project Report, Sprint 3 Integration and Testing. Sprint 3 Review |
| Week 11 | 3/23/15 | Project Report, Sprint 4 Planning, Implementation and Testing |
| Week 12 | 3/30/15 | Project Report, Sprint 4 Integration and Testing. Sprint 4 Review |
| Week 13 | 4/6/15 | Project Report, Sprint 5 Planning, Implementation and Testing |
| Week 14 | 4/13/15 | Project Report, Sprint 5 Integration and Testing. Sprint 5 Review |
| Week 15 | 4/20/15 | Finalize Documents, Poster |
| Week 16 | 4/27/15 | Videos, Deliverable and Presentation |

# 4. Appendix

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

## 



## 4.2-Appendix B – Feasibility Matrix

|  |  |
| --- | --- |
| Operational Feasibility | The scope of the proposed system covers each of the problems outlined in section 1.1. Each feature of the overall solution is specifically targeted to one of the outlined problems. This observation, together with the mentors’ validation of the proposed system, makes it operationally feasible. |
| Technical Feasibility | All the resources needed to develop the proposed system (refer to section 3.1.2) are available to the project team. Furthermore, the practicality of the technologies used (e.g., PHP, MySQL) has been proven based on their widespread use both in industry and academia, in small and large enterprise projects. |
| Schedule Feasibility | Due to graduation requirements, it is not possible to extend the project deadlines; they have to be met. The project team and the mentors have agreed on the feasibility of the proposed system based on the time requirements. |
| Economic Feasibility | There will be no development costs to the team given the open sourced nature of the technologies that are going to be used. |

## 4.3-Appendix C – Cost Matrix

The following feasibility matrix represents an estimate of the items and labor required for the project. These estimated costs are accurate as of Monday, April 20th, 2015.

|  |  |
| --- | --- |
| **Item** | **Item Cost** |
| Yii Framework | $0.00 |
| Twitter Bootstrap | $0.00 |
| Easy RTC | $0.00 |
| Solr Search Engine | $0.00 |
| Hardware | $1200.00 |
| Development | $0.00 |
| Testing | $0.00 |
| Contingencies | $240.00 (~20% of total cost) |
|  | **Total:**$1200.00 |

## 4.4-Appendix D - Diary of Meetings

Meeting 1:

Date: 1/23/2015

Start Time: 1:00 PM

End Time: 1:55 PM

On this day I met with Instructor Masoud Sadjadi for 50 minutes from 1:00 to 1:50 and gave me guidelines about GitHub. Allowed me access the documentation and discussed the goal of the initial sprint. We tried to deploy the latest version from development to production unsuccessfully. We agreed on a new meeting on 1/26/2015 @ 9:00 AM.

Meeting 2:

Date: 1/26/2015

Start Time: 9:30 AM

End Time: 10:30 AM

On this day I met with Instructor Masoud Sadjadi and we exported Dev Database into his environment. We set up the development branch in GitHub, his local repository and tagged existing master as v4.0. We created a copy of the main.php file located under JobFair/protected/config/ and we ignore the main.php as it contains the username and password for dev and prod environments. We found a bug while deploying the project in the webserver root folder such that if the name of the folder is not set to “JobFair” the project will not function as this is hardcoded into SiteController.php under JobFair/protected/controllers/. As a result we created two new user stories as follows:

1. Making base directory configurable:
   1. As the admin of virtual job fair, I would like to be able to configure the base url. As it is now, the base url of /JobFair/ is hardcoded in many places in the code. I would like to be able to set the base directory in /protected/controllers/SiteController.php and by changing that, I should be able to install the virtual job fair under any directory that I like.
2. Making the base url configurable:
   1. As the admin of virtual job fair, I would like to be able to install this project on different places (e.g., vjf.cis.fiu.edu, vjf-dev.cis.fiu.edu, or localhost). There should not be anywhere in the code referring directly to the actual base url; instead they should refer to a variable defined in /protected/controllers/SiteController.php that specifies the base url.

Meeting 3:

Date: 1/30/2015

Start Time: 5:15 PM

End Time: 6:30 PM

Met with instructor Sadjadi and mentor Juan Caraballo and went over the user stories collected. We decided that the most important stories are the ones that improves the student and employer user directly.

Meeting 4:

Date: 2/2/2015

Start Time: 9:40 PM

End Time: 10:00 PM

Met with product owner Juan Caraballo to discuss new stories ideas (One click application process for students, administrator reporting service and on the fly resume creation). He instructed me of the policies regarding applying jobs fetched from the different API’s used by VJF. He encouraged me to follow the one click application process for jobs that are directly posted on the VJF system.

Meeting 5:

Date: 2/9/2015

Start Time: 10:00 PM

End Time: 10:20 PM

Met with product owner Juan Caraballo regarding the user stories chosen for the project. In particular he is interested in the Guest Employer and the Guest Student User. We agreed to have another meeting on Thursday, February 12, 2015 at 4:00 PM.

Meeting 6:

Date: 2/13/2015

Start Time: 5:00 PM

End Time: 5:30 PM

Met with product owner Masoud Sadjadi to present the users stories developed in Sprint 1. We agreed for Sprint 2 we should test all functionalities for the system and document the ones not performing as per the Product Owners expectations.

Meeting 7:

Date: 2/23/2015

Start Time: 6:00 PM

End Time: 6:30 PM

Met with product owner Masoud Sadjadi to check on the progress made in sprint 2.

Meeting 8:

Date: 2/27/2015

Start Time: 6:30 PM

End Time: 7:00 PM

Met with product owner Masoud Sadjadi to present the users stories developed in Sprint 2. We agreed for Sprint 3 to focus on several bug fixing to provide more stability to the system. Also, he accepted to extend the upload resume functionality to include update PDF resume, video resume and profile picture.

Meeting 9:

Date: 3/23/2015

Start Time: 9:00 AM

End Time: 10:00 AM

Met with product owner Masoud Sadjadi to present the users stories developed in Sprint 3. We agreed for Sprint 4 to focus on more bug fixing to provide more stability to the system. Also, to do a feasibility study about search engines. All with the vision to incorporate one to the VJF with a unique search bar similar to Google.

Meeting 10:

Date: 3/30/2015

Start Time: 4:00 PM

End Time: 5:00 PM

Met with product owner Masoud Sadjadi to check on the progress made in sprint 4.

Meeting 11:

Date: 4/3/2015

Start Time: 6:00 PM

End Time: 6:30 PM

Met with product owner Masoud Sadjadi to present the users stories developed in Sprint 4. We agreed for Sprint 5 to focus on fixing Indeed API and search result coming from Indeed. Also, to incorporate Solr search engine into VJF.

Meeting 12:

Date: 4/17/2015

Start Time: 7:00 PM

End Time: 7:30 PM

Met with product owner Masoud Sadjadi to present the users stories developed in Sprint 5. He advised the approach needed to make successful videos for the final presentation.

# 5. References

1. Feasibility Study & Project Plan Document v2.0. Spring 2013.
2. Feasibility Study & Project Plan Document v3.0. Summer 2014.
3. Feasibility Study & Project Plan Document v4.0. Fall 2014.
4. Requirement Document v2.0. Spring 2013.
5. Requirement Document v3.0. Summer 2014.
6. Requirement Document v4.0. Fall 2014.
7. Design Document v2.0. Spring 2013.
8. Design Document v3.0. Summer 2014.
9. Design Document v4.0. Fall 2014.
10. Final Deliverable v2.0. Spring 2013.
11. Final Deliverable v3.0. Summer 2014.
12. Final Deliverable v4.0. Fall 2014.
13. "Bootstrap." *2.2.2 Documentation*. N.p., n.d. Web. 24 July 2014. <http://bootstrapdocs.com/v2.2.2/docs/>.
14. "Documentation." *Yii PHP Framework: Best for Web 2.0 Development*. N.p., n.d. Web. 24 July 2014. <http://www.yiiframework.com/doc/>
15. Chacon, Scott. *Pro Git*. Berkeley, CA: Apress, 2009. Online. <http://git-scm.com/book/en/Getting-Started>
16. “Apache Solr.” 5.1.0 *Resources*. N.p., n.d. Mon. 6 April 2015. <http://lucene.apache.org/solr/resources.html>.
17. “Apache Solr.” 4.10.2 *Documentation*. N.p., n.d. Mon. 6 April 2015. <http://lucene.apache.org/solr/resources.html>.
18. “Apache Solr.” 5. 1 *Reference Guide*. N.p., n.d. Mon. 6 April 2015. <https://cwiki.apache.org/confluence/display/solr/Apache+Solr+Reference+Guide>.