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**Project Charter**

**The Virtual Job Fair**

**Nova Scotia Community College**

**Prepared By**

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# Executive Summary

Nova Scotia Community College (NSCC) organizes the largest college-wide information technology career event every year where more than 250 students and over 30 organizations and companies attend. This event provides immense opportunities for students to meet with potential employers and develop networks. During this pandemic, when a large gathering is not allowed and social distancing needs to be maintained, the only possible way to conduct a job fair is virtual. A virtual job fair needs a web-based application where companies and organizations can interact with students.

This project will develop and host the virtual job fair app (VJF) will not only allow companies to communicate with students from different locations but also employers can interview candidates. It makes communication faster as students can choose any of the 3 options, text messages, live chat, or video streaming to communicate with organizations and companies. Employers also encourage on-line fair as they don’t need to join the fair in-person for the entire day and as a result, more companies are interested to attend.

# Project Purpose/Justification

## Business Need

The year 2021 is different in many aspects, especially for the global pandemic, and during this time NSCC cannot host a traditional in-person fair. For this, NSCC is going to organize the online job fair for the first time.

To organize a job fair, NSCC needs an application where students can communicate in various ways to potential employers. The application should provide different ways of communication, as many of the attendees prefer in-person talking, some others prefer to live chat or just text messaging. The app should accommodate some other students from different campuses.

## Business Objectives

The virtual job fair app (VJF) directly supports the NSCC’s goals and objectives to provide a variety of career resources, they are

| **Objectives** | **Description** |
| --- | --- |
| Provide career resources | Web-based app will enable students to communicate with potential employers in real-time and explore career opportunities. |
| Improve communication and accessibility | Graduates and students can communicate with companies via video, live chat, or even text message. They do not need to wait in a queue to contact any employer for a long time. Students from different campuses can attend the fair. |
| Utilize resources | The VJF will be developed by existing students, students will get experience to work in a real industry project. |
| Reduce costs | No physical space is required, entertainment, logistics, food costs will reduce. |

By implementing the VJF project, NSCC will have a web-based app with the following features

* The app hosts virtual job fair and conferences, engage participants with companies over real-time chat, text message, and video without making the app download.
* Enable to interact with 50 companies with 50 students over video streaming at a time.
* Enable to communicate 100 companies with 500 students over live chat at a time.
* Allow communicating through text messages, through Whatsapp, emojis, zoom integration.
* Allow scheduling an online meeting/interview.

# Project Description

During this pandemic when a large gathering is not allowed, the VJF project will enable NSCC to host the job fair virtually. The VJF project will analyze the existing in-person job fair features and will implement various ways of communication. The onsite meeting, discussions with stakeholders, feedback from students, feedback from companies will be collected and analyzed to make the system usable and friendly. The team consists of NSCC IT students, who will volunteer to develop the project. They will work for requirements gathering and analysis, design, development, testing, and deployment. Each member of the team is committed to working at least 10 hours per week for at least 5 months. For this project, 3 faculty members agreed to advise the team to make the project a success. Once the project is completed, NSCC will own the web-based app to host a virtual job fair and can organize the job fair virtually afterward.

## Project Objectives and Success Criteria

The objectives which support the milestones and deliverables for this project have been identified. To achieve success on the VJF project, the following objectives must be meet within the designated time and budget allocation:

* Develop the Business Requirement Document to present to the team by Oct 27, 2020.
* Design activity diagram, sequence diagram within Nov 15, 2020.
* The first version of the module including chat feature, text feature and video communication features should be ready by Dec 20, 2020.
* Test plan, test strategy and automation testing design should be prepared by Dec 07, 2020.
* The app hosts virtual job fair and conferences, engage participants with companies over live chat, text message and video without making the app download.
* Implement the solution and host to the web within Feb 23, 2020.

## Requirements

This app must meet the following list of requirements to achieve success.

* The solution must be tested in the production and testing environment prior to deployment
* The solution must be web-hosted
* The app must be implemented to communicate 100 companies with 500 students over video streaming, live chat and by text messaging without any disruptions.

Additional requirements may be added as necessary, with project sponsor approval, as the project moves forward.

## Constraints

The following constraints pertain to the VJF project:

* The project will be implemented during the regular semesters, students who will be volunteered to develop the app might be under extra pressure.
* There are a limited number of commercial off-the-shelf (COTS) products which cost a huge amount of money.
* As the project will be developed in-house there will be limited support from third party service provider.
* The student volunteers will be working on this project, they do not have prior experience to develop such web-based app.

## Assumptions

The following assumptions apply to the VJF project. As project planning begins and more assumptions are identified, they will be added accordingly.

* Students and participant organizations and companies do not need any special training to use the web-based app.
* Funds are available to implement the project.
* Students are committed to work voluntarily, 10 hours per week for at least 5 months.
* All respected departments of NSCC will provide necessary supports for successful project completion.

## Raid Analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |
| **No** | **Description** | **Type** | **Criterion** | **Next Action** | **Owner** |
| 1 | Resource bottleneck due to the team members are busy with academic work | Risk | Medium | Look for additional resources internally | Ricardo O |
| 2 | Participants do not need any training to use the web-based app | Assumption | Medium | Create a document for how to use the app | Abdullah K |
| 3 | Funds are available to implement the project | Assumption | High | Look for free alternative tools | Ashraf M |
| 4 | If any of the team members leave the project | Risk | Critical | Look for internal resources and contractors | Ashraf M |
| 5 | Advisors may get busy with their regular academic work | Risk | Medium | Communicate with them to schedule a regular meeting with the team | Matt W |
| 6 | IT Job Fair website may have a compatible issue with the proposed app | Issue | Medium | Contact with Blackbird team | Kelly C |
| 7 | Employers survey feedback may get late which might affect design and testing | Dependency | Medium | Summarize the basic requirements first | Ricardo O |
| 8 | An Additional fund might not be available | Issue | High | Use available additional IT resources | Ashraf M |
| 9 | All respected departments of NSCC will provide necessary supports | Assumption | Medium | Communicate with individual dept to expedite work | Abdullah K |

## Preliminary Scope Statement

The VJF project will include requirement gathering and analysis, design, development, testing, and deployment to the web. All members, hardware, and software resources will be managed by the project team. All required testing will be done in the development environment, testing environment and user acceptance testing will be done before deployment. All project funding will be managed by the project manager up to and including the allocated amounts in this document. Any additional funding requires approval from the project sponsor, Jamie Hartling. All the project management documents will be prepared and updated regularly by the team and will be kept in a central repository.

# Methodology

The VJF project will be developed by using the scrum framework to implement the Agile development methodology. The methodology allows us to streamline workflow and create a nimble team that can handle ever-changing requirements. Development divides into several phases, each of them results in a ready-to-use product. At the end of each step, is called sprint, a ready product is delivered to the client. The client’s feedback helps several possible problems or changes the initial plan if needed as the client has no previous experience of using such a product and the project must be completed within the time frame.

## Phases of Scrum Model

**Product Backlog Creation:** A product backlog, a list that consists of features that should be implemented during the development process. It’s every item is called a user story which is ordered by priority. The description of every user story should include its importance, initial estimate, components, how to demo, priority, bug tracking ID.

**Spring Planning and Spring Backlog Creation:** Each sprint’s duration will be 2 weeks which will allow getting clients feedback more frequently. The team will select the user stories based on importance and will decide how to solve the task. The sprint backlog will be created which will consist of user stories that will be completed during the current sprint.

**Working on the Scrum:** A task board will be used to track the current working process. Particular user stories and a bundle of sticky notes with a description of single tasks that are needed for implementation of the story will be used. Scrum meetings will be held every day to listen to every single member and track the progress of the sprint. A burndown chart shows how many tasks remain uncompleted will be implemented to control the development process and will be updated after every meeting.

**Testing and Product Demonstration:** A full life cycle testing process is adopted to ensure quality. The automation testing by using java and selenium will be done. The scrum team will demonstrate the result and will create a review from the client.

**Retrospective and Next Spring Meeting:** The team will discuss to conclude what went well during the working process and what can be done better during future iteration.

# Risks

The following risks for the project have been identified. The project manager will determine and employ the necessary risk mitigation strategies as appropriate to minimize the likelihood of these risks:

* The team consists of the current students and formal students. In the middle of the project if any member leaves might delay the project delivery.
* Although some addition resources are agreed to work for the project and are included in the project. If many members leave, the project might need to hire contractors, which will cost more.
* Three faculty members will advise the project members, the advisors may be busy for their regular faculty work.
* Additional funding may not be available due to the limited resources of the school.
* If any free tool will be available with the same functionality by the time of the project development, the project may not be needed.

# Project Deliverables

The following deliverables must be met upon the successful completion of the project. Any changes to these deliverables must be approved by the project sponsor.

* The fully hosted virtual job fair solution.
* Technical documentation for the VJF solution.
* Recommendation list for future improvement consideration.

# Summary Milestone Schedule

The project Summary Milestone Schedule is presented below. As requirements are more clearly defined this schedule may be modified. Any changes will be communicated through project status meetings by the project manager.

| **Milestones** | **Target Date** |
| --- | --- |
| Requirements gathering completed | 10/19/2020 |
| Requirements analysis and final requirements | 10/27/2020 |
| Test Plan | 11/20/2020 |
| Integration design of text, live chat, and video features to the app | 11/23/2020 |
| Final integration design | 12/01/2020 |
| Integration completed | 01/14/2021 |
| Refactoring of code development | 01/26/2021 |
| Load testing | 09/02/2021 |
| Initial deployment | 02/17/2021 |
| Final deployment | 02/23/2021 |

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# Summary Budget

The following table contains a summary budget based on the planned cost components and estimated costs required for the successful completion of the project. The team will be volunteering to develop the application. Some of the team members have already worked to develop job fair website volunteer basis as a part of the Blackbird project. The costs do not include any wages or remuneration of the team.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Phases** | **Description of Work** | **Start Date** | **End Date** | **Costs** |
| Requirement gathering and Analysis | On-site meetings, discussion with stakeholders, a survey about desire features to students and companies, analysis of requirements. | 10/06/2020 | 27/10/2020 | $2,000 |
| Design | Interface design, software design, database design, text, live chat, and video features integration design. | 11/03/2020 | 12/01/2020 | $8,000 |
| Development | Develop an interface module, develop system module, complete integration, unit-testing | 12/08/2020 | 01/26/2021 | $20,000 |
| Testing | System testing, integration testing, Bug fixation, documentation | 12/01/2021 | 02/09/2021 | $10,000 |
| Deployment | Portal web hosting | 02/16/2021 | 02/23/2021 | $20,000 |
|  |  | **Total** |  | **$60,000** |

# Project Team

The key personnel who will be responsible for completion of the project

|  |  |
| --- | --- |
| Client | Marc Scarfone |
| Sponsor | Jamie Hartling |
| Project manager | Ashraf Mamun |
| Team | Abdullah Karson, Kelly Chin, Ricardo Oliveira, Matt Walsh, Sid Soojhawon |
| Advisors | Melody Joy, Michael Caines, Geoff Gillespie |

# Project Approval Requirements

Success for the FJV project will be achieved when a fully tested the app and successfully deployed to the web, and all technical documentations are prepared within the time and cost constraints indicated in this charter. Additionally, this measure of success must include a recommendation list for future improvement considerations as we fully anticipate the necessity of this solution to evolve in order to prevent future threats. Success will be determined by the Project Sponsor, Mr. Jamie Hartling, who will also authorize completion of the project.

# Project Manager

Ashraf Mamun is named Project Manager for the duration of the VJF Project. Mr. Mamun’s responsibility is to manage all project tasks, scheduling, and communication regarding the project. His team, consisting of four IT specialists and one business analyst will be matrix support from the NSCC’s IT department.

Mr. Mamun will coordinate all resource requirements through the IT department manager, Adrien Adler. Mr. Mamun is authorized to approve all budget expenditures up to, and including the allocated budget amounts. Any additional funding must be requested through the Project Sponsor, Jamie Hartling. Mr. Mamun will provide weekly updates to the Project Sponsor and to the client, Marc Scarfone.

# Authorization

The VJF project is authorized to move forward in accordance with the information contained in this charter.

Approved by the Project Sponsor:

Date:

Jamie Hartling

Academic Chair

Technology and Environment

Nova Scotia Community College

# Appendix

* Gantt Chart

# Reference

*Project Charter* [DOC]. (n.d.). Project Management Docs. Retrieved From:

[https://www.projectmanagementdocs.com/template/project-initiation/project-charter-multi-page-version/#axzz6bejB4O4v](https://www.projectmanagementdocs.com/template/project-initiation/project-charter-multi-page-version/%23axzz6bejB4O4v)

Makar, A., & Mochal, T. (2013, October 27). IT project management terms you should know. Retrieved October 23, 2020, from <https://www.techrepublic.com/blog/it-consultant/it-project-management-terms-you-should-know/>

# Glossary of Terms

Virtual: Existing, seen or happing online or on a computer screen by using software, rather than in person or in the physical world.

Client: Clients are the people or organizations for whom the project is being undertaken.

Project Manager: They are organized, passionate and goal-oriented who understand what projects have in common, and their strategic role in how organizations succeed, learn and change.

Sponsor:  The project sponsor is “a person or group who provides resources and support for the project, program or portfolio for enabling success.

Team member: Team members are the individuals who actively work on one or more phases of the project.

Deliverables: Identify the product, service, or results created when all of the work in this work package is complete. Include any critical intermediate deliverables.

Budget: Designate the budget for this work package, plus any critical resource information and assumptions.

Milestones: A list of start dates, end dates, intermediate milestones, interdependencies, constraints and assumptions for the deliverables.

Risks: Include any known threats and opportunities with response strategies.

Team: The project team consists of the full-time and part-time resources assigned to work on the deliverables of the project.

Requirements: Requirements are descriptions of how a product or service should act, appear, or perform.

Scope: Scope is the way you describe the boundaries of the project; it defines what the project will deliver and what it will not deliver.

Sprint: A sprint is a scrum-based agile methodology concept that is like an iteration.

User Story: A user story is an agile version of a project requirement. A user story is comprised of a couple of sentences that defines who, what, and why for a given requirement and can be documented on index cards or sticky notes.

Assumption: There may be external circumstances or events that must occur for the project to be successful