PROJECT CHARTER

Reporting and Dashboard Service Improvement

Revised by Samara Flueck, Sunghwan Park, and Skylar Kramer

May 14, 2021

EXECUTIVE SUMMARY

The Digital Investment Office is a part of the Government of BC and manages funding for capital investment projects aimed at improving digital services for British Columbians. Ministries that are awarded funding must submit quarterly reports detailing their performance. Currently, this is a time-consuming manual process where reports are submitted on individual spreadsheets. Data analysis of these reports can be challenging due to the subjectivity of some fields, human error, and a lack of measurable information.

This process can be improved through automation by the utilization of a web application. A proof-of-concept can be developed that uses a digital form to capture report data, then stores it in a database, and then surfaces it into a dashboard for decision makers. The key deliverables of this project are to develop a functional containerized prototype and handover documentation detailing how to operationalize the proposed application.

PROJECT PURPOSE/JUSTIFICATION

Business Need/Case

The Digital Investment Office requires an application to improve the current process of submitting quarterly reports. User needs must first be identified and then an application designed to meet those needs. This application should emphasize reducing data entry errors by automating existing manual processes to facilitate timely and quality data analysis.

Business Objectives

The Business Objectives for this project support the Digital Investment Office's desire to improve their services by improving the current quarterly report submission process and access to project information. They include the following:

- Define the problem so that the solution is useful in improving the current quarterly reporting method.
- Design a solution to the problem defined.
- Deliver a functional prototype in a repository that serves as a proof-of-concept of how to improve quarterly reporting methods.
- Deliver handover documentation that details how to operationalize a digital reporting application based on the functional prototype.

PROJECT DESCRIPTION

The Reporting and Dashboard Service Improvement project aims to create a service which will make it faster and easier to submit quarterly reports, examine trends, and review past reports. The proposed application will provide users with the means to submit quarterly reporting data using a digital form and have sections auto-populate by using historical or account data. This will aid in reducing the time it takes to fill out a report while also facilitating correct and consistent data entry. The application should also allow viewing of trends and charts based on past reports.

Project Objectives and Success Criteria

In order to be considered a success, the Reporting and Dashboard Service Improvement project must meet certain requirements and milestones within the time constraints laid out by Camosun College. The following objectives have been identified as a measure of the project's success:

Phase 1: Requirements & Design Phase (Planned completion date: May 25th, 2021)

- Complete basic project outline and design.
- Design system specifics and UI.

Phase 2: Development Phase (Planned completion date: July 6th, 2021)

- Allow users to view project and quarterly reports.
- Allow users to submit quarterly reports.
- Develop a page which can generate performance charts.

Phase 3: Refine Phase (Planned completion date: July 20th, 2021)

- Allow users to view the performance dashboard.

Phase 4: Hand-off Phase (Planned completion date: August 4th, 2021)

- Complete a final demonstration of system features.
- Complete handover documentation.

Requirements

In addition to reaching each of the milestones, the project has several final requirements before it is considered a success:

- The application must facilitate consistent and reliable data entry and storage.
- The application must be easy to understand for non-technical users.
- The application must be hostable on a distributed environment such as the BC Government's OpenShift environment.

Constraints

The following constraints have been identified that the sponsor and project team must consider:

- The project team is unable to collaborate in person due to COVID-19 restrictions.
- The team must complete the project within the allotted Capstone time frame.

Assumptions

Several assumptions have been made by the project team regarding this project, they are as follows:

- Adequate support will be provided by the sponsor to clarify requirements.
- The project team will conduct most of their work between Monday and Friday.
- The project team will have access to the BC Dev Exchange community and resources.
- Adequate time will be allotted to complete the project.

Change Management

The Reporting and Dashboard Service Improvement project will be a proposal on how to improve the current method of submitting quarterly performance reports. The proposed system should be intuitive and not require specialized training for users. This project's purpose is to develop a proof-of-concept prototype. Therefore, handover documentation detailing how to operationalize the proposed system must also be created.

Preliminary Scope Statement

The Reporting and Dashboard Service Improvement project will include a proposed system design, a proof-of-concept prototype, and handover documentation detailing how to operationalize the proposed system. This proposed system will be designed with consideration to the roles and needs of the identified stakeholders and entities. Forms will utilize historical data from previous reports to auto-populate fields to reduce human error and time spent filling out reports. The application will allow the querying of multiple reports to surface data into a dashboard system to view trends and track project progress.

RISKS

This project is meant to implement not a full-featured service but a prototype to be passed off for the next development phase. The project team and sponsor agree to mitigate risks and trim service features to achieve the core purposes.

Risk #	Risk Description	Owner and Recommendation	Priority	Risk Treatment (Accept/Mitigate/Transfer)
1	**Indeterminable Reporting Forms** Reports have been written subjectively without the clear business rules. It could take much time to define strict rules through communication with stakeholders.	**Sponsor** Allocate two sprints to analyze data and define rules. Hold enough meetings with stakeholders.	**Medium**	**Accept**
2	**Inexperienced with OpenShift Platform** The project team has not worked in an OpenShift environment prior to the start of this project.	**Project Team** The project team will invest time to learn this new platform under the guidance of the Technical Lead.	**High**	**Accept**

Figure 1: Risk Chart

PROJECT DELIVERABLES

Project sponsor approval must be required for adding additional deliverables to avoid scope creep. The following deliverables are proof of project success and must be achieved by the project completion date:

- Functional prototype as a proof-of-concept
- Handover documentation for the next development phase

PROJECT APPROACH

This project will follow an Agile development approach with two-week sprints. Sprints begin on Wednesdays and end on Tuesdays. Each sprint will begin with a sprint planning meeting and end with a sprint retrospective meeting. In addition, a sprint review meeting will be held midway through each sprint to determine if a pivot is required. These meetings will serve as a weekly check-in with the sponsor and additional meetings will be scheduled with the sponsor and stakeholders as needed. Both project team and sponsor will be present virtually in Microsoft Teams during these meetings. Weekly check in sessions will be held with Camosun instructors where the team will present their weekly status report.

Daily stand-up meetings will be held by the project team virtually where each member will:

- State what they have done since the last stand-up meeting.
- State what they plan to do that day.
- State anything that may be blocking their progress.

The following tables outline our planned sprint cycle and timeline:

	Week 1								Week 2						
	Su	M	T	W	Th	F	S		Su	M	T	W	Th	F	S
Client Check-in				X								X			
Sprint Planning				X											
Scrum Meeting		X	X	X	X	X				X	X	X	X	X	
Instructor Check-in			X		X						X		X		

Figure 2: Two-week Sprint Schedule

	Sprint 0 May 3 - May 11	**Sprint 1** May 12 - May 25	**Sprint 2** May 26 - Jun 8	**Sprint 3** Jun 9 - Jun 22	**Sprint 4** Jun 23 - Jul 6	**Sprint 5** Jul 7 - Jul 20	**Sprint 6** Jul 21 - Aug 4
Sprint Focus	Learn	Design	Ramp Up	Develop	Feature	Test and Refine	Deliver
Phase	Requirements & Design		Development			Refine	Handoff

Figure 3: Sprint Timeline

Summary Milestone Schedule

The following is the proposed summary milestone schedule and is an estimate of our milestones. As the project progresses and requirements are identified these milestones are subject to change upon the agreement of the sponsor and project team.

Project Milestone	Target Date
• Project Start	May 3, 2021
• Project Charter	May 14, 2021
• DevOps Training	May 14, 2021
• Design Data Models and UI	May 25, 2021
• Display Projects and Quarterly Reports	June 11, 2021
• Input Project and Quarterly Report	June 22, 2021
• Reporting Rules and Conditions, Performance Charts	July 6, 2021
• Dashboard	July 23, 2021
• Final Client Demonstration	July 28, 2021
• Handover Documentation	August 4, 2021
• Project Complete	August 4, 2021
• Symposium Presentation/Demonstration	TBA

Figure 4: Summary Milestone Schedule

Conclusion

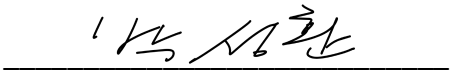
The goal of this project is to contribute to the Digital Investment Office's commitment to improve their services and quarterly reporting process. We will achieve this by defining the problem, designing a solution, and then developing an application prototype that will serve as a proof-of-concept to be presented to stakeholders. The sponsor will engage with the team regularly and support the team's learning of new technologies by providing access to the necessary resources. Samara Flueck will assume the role of primary contact for this project team.

AUTHORIZATION

Project Sponsor

Name / Title	Signature	Date
Shashank Shekhar	Shashank Shekhar Digitally signed by Shashank Shekhar Date: 2021.05.18 09:16:49 -07'00'	

Team

Name	Signature	Date
Samara Flueck		2021/05/14
Sunghwan Park		2021/05/14
Skylar Kramer		2021/05/14