



Content Hub

Terms of Reference

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Version 1.0

Team Galvatron

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Document Information

Revision History

Date	Version	Status	Prepared by	Comments
Jan 9, 2020	0.1	Start	Team Galvatron	Initial Document
Mar 30, 2020	1.0	Final submission	Team Galvatron	Final Document

Document Control

Role	Name	E-mail	Telephone
Project Manager	Tyler Nee	tyler.nee@gmail.com	778-323-4899

Introduction

Within the Vancouver software development community, there is a lack of content for individual IT organizations to share in order to drive online traffic to their respective platforms. Thus, this project serves as a minimum viable product to build a platform that allows individuals to contribute and share content with the hopes of linking posts back to their platforms. The content will be filtered and managed by admins who approve and reject postings based on an approval system. With a HQ in Vancouver, Galvanize has decided to spearhead this project in order to tackle this problem.

Project Information

Description

The product will consist of a website that consolidates content and points to the content's original location from other websites and repositories. The site will have admins from contributing organizations monitoring content published to the site via an admin approval system. The main interface of the website will contain a portal to access linked articles. Any individual will be able to create an account and submit content to the site subject to admin approval.

Deliverables

- System architecture documents
- Source code for frontend web application and backend server
- Database setup script
- Deployment guidelines

In Scope

Technical Requirements

- Frontend: React, Javascript
- Backend: Node.js, Javascript
- Database: MySQL

Functional Requirements

- Allow users to read the submitted articles via:
 - Logging into the web application and browsing the available blog posts
 - An RSS feed
- Allow users to search or filter by name of article, company or category
 - Categories are managed in the admin module of the system
- Allow users to contribute an individual article via a blog post link
 - Submission requires a title, and link to website/blog/repository
- Allow users to submit a blog stream via a blog stream link
 - Submission requires a title, and link to the blog stream
- Allow users to self register via Google OAuth2.0
 - Self registration requires users to login with their Google account.
- Users who have subscribed to the service should receive an email showing all newly approved articles
 - The frequency of these emails is a parameter that the user can change in their user profile.
- Allow admin members to change the role of users to User, Approver, Admin
- Allow admin members and approvers to vote and authorize content to be published
 - Approval threshold for submissions can be changed by admins
 - Anticipated approval threshold is 4 for public submissions
 - Anticipated approval threshold is 2 for admin member submissions
- Allow the scheduler to review approved blog streams and submit new posts.

Non-Functional Requirements

- Max number of articles to be 5000
- Response times for searches/filters to be less than 4 seconds
- System can support at least 100 concurrent users
- Multi-browser support (Chrome, Microsoft Edge, Safari, Firefox)

Out-of-Scope (Stretch Goals)

- Website usage reports
- Posting articles to a twitter feed that people can subscribe to. Similar to LinkedIn, and perhaps Facebook.
- Displaying images alongside each post.

Constraints

- Time (14 weeks, from Jan 7th to April 10th)
- Website package cannot be used
- Technology stack (NodeJS/Express, and/or React)

Assumptions

- There is a maximum of 30 admins
- Maximum articles is 5000

Risk Assessment

Assessment	Risk Level	Risk	Risk Mitigation
Availability	Low	Illness or unplanned leave of group member(s) can lead to more work being done by other group members.	We will redistribute tasks so that an even workload is shared among all team members.
Uncertain assumptions	Medium	The project contains many assumptions without confirmation from the sponsor	We will continuously check our assumptions with the TA on a weekly basis to ensure that we have made the right assumptions.
Security	Medium	Team members do not have relevant experience with internet security. The product may have security vulnerabilities.	We will research into security vulnerabilities and get insight and feedback from our TA.
Changing requirements	High	Changing requirements may lead to additional and/or redundant work being done	We will redistribute our time on new requirements based on its priority.

Project Approach and Acceptance Criteria

Estimated Schedule

Milestone or Key Activity	Start	Complete
Initiation	Jan 7th, 2020	Jan 16th, 2020
Requirements	Jan 17th, 2020	Jan 28th, 2020
Environment Setup	Jan 29th, 2020	Feb 11th, 2020
Implementation	Feb 12th, 2020	Mar 31th, 2020
Testing	March 20th, 2020	April 7th, 2020
Project Completion	April 1st, 2020	April 7th, 2020

Acceptance Criteria

Criterion	How Measured
Login Portal	Users are able to register and login to the application.
Approval System	User posted articles can be approved by administrators before being published.
Admin System	Admins are promoted by the site administrator. The maximum number of admin is 30.
Configuration Panel	Administrators can configure settings for the application.
Notification Service	Users subscribed should receive email notification of newly posted articles.
Scheduler	New posts from approved blog posts should be periodically submitted into the system.
Website Aggregator	Main page shows links to approved articles, which can be searched and filtered

Project Governance

Project Team Responsibilities, Structure and Resources

Project Role	Person Responsible	Responsibility
Project Manager	Tyler Nee	Balancing work distribution among members, project planning, contacting TA and resolving conflicts.
UX/UI	Tony Kong, Pengwei Zhou	Designing graphical user interface.
Database	Vickie Yen, Pengwei Zhou	Defining the detailed database design and initial setup of the database.
Architect	Tony Kong	Determining coding standard and project structure.
Quality Assurance	Peter Han, David Guo	Assessing the quality of all specifications and technical design documents.
Devops	David Guo	Deployment of application and managing build automation.
Frontend	Peter Han, Yuting Wen, Tyler Nee	Structuring client side code and using the server APIs to retrieve and process data used by the UI.
Backend	David Guo, Vickie Yen, Tyler Nee	Creating APIs used by the clients and sending queries to the database.

Project Communication Plan

Project Meetings

- Tentative Team meeting every Monday from 5:30 pm to 7:30 pm at DLC/X-wing
- Online meetings upon needs
- Thursday meeting with TA

Project Reporting

- Project reporting will be done with our TA on Thursday at an assigned time

Project Cost

Man hours:

Item	Hours
Architecture/Design	80 hours
Implementation	140 hours
QA Testing	40 hours
Deployment	20 hours
Total	280 hours

Monetary costs:

Project will be hosted on a free AWS EC2 instance and we do not anticipate any monetary costs with this project.

Appendix

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