Social Pulse Insight Hub

Project Plan

Student: Virag Szabo (4727444)

Date: March 1 - 15, 2024

Subject: Threading in C#

School: NHL Stenden

# Table of contents

Contents

[Table of contents 2](#_Toc161427122)

[1 Project Overview 3](#_Toc161427123)

[2 Scope 3](#_Toc161427124)

[3 Objectives 3](#_Toc161427125)

[3 Stakeholders 3](#_Toc161427126)

[4 Timeline 4](#_Toc161427127)

[5 Task and Activities 5](#_Toc161427128)

[5.1 Design 5](#_Toc161427129)

[5.2 Development 5](#_Toc161427130)

[5.3 Testing 5](#_Toc161427131)

[5.4 Presentation 5](#_Toc161427132)

[6 Risk Management 6](#_Toc161427133)

[7 Mitigation Strategies 7](#_Toc161427134)

[8 Definition of Success 8](#_Toc161427135)

[8.1 Key Performance Indicators (KPIs) 8](#_Toc161427136)

[8.2 Success Criteria 8](#_Toc161427137)

# 1 Project Overview

The Social Pulse Insight Hub project aims to develop a comprehensive application for social media analytics. It will allow users to securely log in, integrate their social media accounts, fetch and visualize data, and analyse metrics through an intuitive dashboard.

# 2 Scope

The project scope includes designing and deploying a SQL Server database schema, creating UI mock-ups, developing backend and frontend components, testing functionalities, and delivering a presentation summarizing project objectives and outcomes.

# 3 Objectives

* Validate essential features like user authentication, social media integration, data fetching, and analytics dashboard.
* Ensure cross-platform compatibility, usability, accessibility, performance, scalability, security, and error handling.
* Perform integration and regression testing to maintain application quality.
* Present the project to stakeholders, including instructors, classmates, and potential users.

# 3 Stakeholders

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Email | Phone | Place |
| Rob Loves | rob.loves@nhlstenden.com | +31610480182 | Emmen |

# 4 Timeline

|  |  |  |
| --- | --- | --- |
| Phase | Date | Description |
| System Architecture | March 1 - 15, 2024 | Define the overall application. Write Start Document. |
| Database Design | March 15, 2024 | Plan the structure of the database to store user data and analytics metrics. |
| User Interface Mock-ups | March 15, 2024 | Create and finalize mockups for the analytics dashboard and user settings. |
| Kick-off | March 15 - 17, 2024 | Present the idea for the lecturer. |
| Development | March 18 - 31, 2024 | Create a project and build up the starting structures of the project. Add APIs. Adjust visualization. Add social media registration. |
| Testing | March 18 - 31, 2024 | Test the features and fix the project. |
| Submit | March 30, 2024 | Hand in the project with all the necessary documents and folders. |
| Presentation | March 31, 2024 | Present the work you have done. |

A screenshot of a graph

Description automatically generated

# 5 Task and Activities

## 5.1 Design

**Database:** Design and deploy a SQL Server database schema for storing user data and social media analytics.

**Mock-ups:** Create UI mock-ups using Adobe XD, incorporating feedback and ensuring consistency across platforms.

## 5.2 Development

**Environment Setup:** Configure the development environment with necessary tools and frameworks.

**Backend Development:** Implement backend logic for authentication, social media integration, and data fetching.

**Frontend Development:** Develop cross-platform UI components using .NET MAUI and ensure compatibility.

## 5.3 Testing

**Test Plan:** Develop and execute a comprehensive test plan covering unit, integration, and end-to-end tests.

**Bug Fixing:** Identify and resolve any bugs or issues discovered during testing iterations.

## 5.4 Presentation

**Preparation:** Prepare a presentation summarizing project objectives, features, achievements, and challenges.

**Delivery:** Practice and deliver the presentation to stakeholders, including instructors, classmates, and potential users.

# 6 Risk Management

**Technical Complexity:** Integrating multiple social media APIs and implementing real-time data updates may pose technical challenges.

**Resource Constraints:** Limited availability of the student or access to necessary tools and technologies may impact project timelines and deliverables.

**Security Vulnerabilities:** Inadequate security measures could result in data breaches or unauthorized access to sensitive user information.

**Scope Creep:** Unclear or evolving project requirements may lead to scope creep, causing delays and budget overruns.

**Third-party Dependencies:** Reliance on third-party services for social media integration may introduce risks related to service outages or changes to API functionality.

**User Adoption:** Low user adoption or engagement with the application may indicate a lack of perceived value or usability issues.

# 7 Mitigation Strategies

**Technical Prototyping:** Conduct early prototyping to tackle technical challenges upfront.

**Team Training:** Provide skill development opportunities to enhance team expertise.

Security Audits: Regularly audit and test security measures to proactively address vulnerabilities.

**Incremental Delivery:** Use iterative development to manage scope and prioritize features based on user feedback.

**API Diversification:** Integrate alternative APIs to mitigate risks associated with service disruptions.

**User-Centric Design:** Continuously gather user feedback to improve application usability and engagement.

# 8 Definition of Success

## 8.1 Key Performance Indicators (KPIs)

**User Engagement:** Measure the number of active users, session duration, and frequency of interactions with the application.

**Data Accuracy:** Monitor the accuracy and reliability of social media analytics data displayed on the dashboard.

**Performance Metrics:** Track application performance indicators such as response time, load time, and server uptime.

**User Satisfaction:** Collect user feedback through surveys or reviews to assess satisfaction with the application's features and usability.

**Adoption Rate:** Evaluate the rate of adoption among target users and identify factors influencing adoption or retention.

**Security Compliance:** Ensure compliance with security standards and regulations, such as GDPR or HIPAA, to protect user privacy and data integrity.

## 8.2 Success Criteria

**Achievement of Milestones:** Successful completion of project milestones within defined timelines and budgets.

**Positive User Feedback:** High satisfaction ratings and positive reviews from users regarding the application's functionality, performance, and user experience.

**Increased User Engagement:** Growth in the number of active users and user engagement metrics over time.

**Accurate Analytics:** Consistent delivery of accurate and reliable social media analytics data, validated through internal testing and user feedback.

**Adherence to Security Standards:** Compliance with security standards and regulations, as validated through security audits and testing.

**Stakeholder Satisfaction:** Satisfaction of project stakeholders, including sponsors, end-users, and team members, with the overall project outcomes and deliverables.