Team Keepify Subscriptions Flow Al Project Plan

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Synopsis

Goals

The main goal of this project is to create an app that adheres to the following description:

Subscriptions Flow AI is a Shopify application that tackles subscription churn - the constant loss of subscribers due to cancellation or expiration. This is an issue that reduces merchants' predictable revenue, and in turn can make or break any of the 5.6 million active Shopify businesses. Subscriptions Flow AI supports merchants by allowing them to intervene whenever a customer is attempting to cancel. Before a customer has the chance to cancel, the ChurnGuard AI model will evaluate the churn risk for all customers. Based on this analysis, merchants will have the ability to initiate upsell methods to attempt to retain customers, such as offering them a discount. Store owners can also create custom discount offers based on delivery and subscription intervals. Depending on merchant needs, the application can be extended to support increased automation - streamlining their experience by suggesting personalized strategies for customer retention.

Scope

What is in scope:

- 1. Shopper Interface
 - a. The app will show end users the type of discount available to them when choosing a subscription delivery and payment plan
 - b. Users will be prompted with retention strategies upon cancellation
- 2. Admin Interface
 - a. The app will include interfaces for admins to control various aspects of the app that include the following
 - i. Creating subscription plans
 - ii. Setting up subscriptions for users
 - b. Admins will be able to view analytics pertaining to the churn scores and factors of their products and customers
- 3. Churn Guard
 - a. The app will provide reasons to the admin for why each customer has a certain churn score
- 4. Interventions
 - a. The app will be able to offer rewards to users in the form of discounts for not canceling their subscriptions
- 5. Al
- a. The app will use machine learning and or AI features to determine churn scores
- b. Al will be integrated into the app as a core feature that users are aware of
- 6. The app will adhere to Shopify UI and App standards / regulations
 - a. The use of Polaris UI
 - b. Shopify security / webhooks / content redaction requests
- 7. The app will have multiple tiers that offer different levels of control over the aforementioned features

What is not in scope:

- 1. The app will not remake any of Shopify's API features
 - a. Anything that can be done by the Shopify API will be required to use the API
- 2. The app will not handle global business any differently than Shopify does
- 3. The app will not include an AI chatbot
- 4. The app will not remind users of their unused subscriptions / interact with users who are at risk of churn unprompted
- 5. Bonus features mentioned in the document

Project Timeline

Milestones

1. Housekeeping and Project Organization

Before the team can begin coding there should be a unanimously solid foundation of knowledge between team members and the project sponsor. This includes creating necessary diagrams and documentation of the project domain, scope and synopsis. The team must also set up their project management and version control tools as well as agree on implementation tools. After review from the project sponsor the team will be able to begin setting up for developing the app.

2. Tickets / Epics Scaffolding

Before we begin development we should have tickets and epics in our backlog that represent all of what needs to be done to support the initial MVP. These tickets do not need to be fully fleshed out - they just need to exist and be able to map 1:1 to the requirements doc.

3. UI Review and Mockup Approval

Our sponsor has provided us with UI mockups for his vision of the app. Until we map out the requirements with the UI we cannot know for sure if the UI fully supports all of the functionality. Additionally, we do not know how efficient the UI / UX is until we test it. The team will create mockups of the UI that reflect this analysis.

4. DBMS Plan

We need to plan out the schema for our data models. We also need to plan where and how we are going to host the database.

5. Al Plan

We need to plan out specifically how AI will be integrated into the app. This can include the following considerations

- 1. Where is the Al hosted / which model
- 2. Which features are impacted by AI

6. Initial MVP

The initial MVP will contain most if not all of the non-bonus requirements laid out by the project sponsor. This will be iteratively worked on throughout the semester in an Agile Scrum methodology. This may further be broken down into the following

- 1. Initial UI adherence
- 2. Backend API
- 3. Database management
- 4. App testing

The initial MVP is scheduled to be delivered on Tuesday November 25th 2025 Time permitting the following features may be added to the project scope and will expected in the MVP - otherwise they are planned to be included in future releases

- 1. Win back feature
- 2. Migration to SubscriptionsFlowAl from other similar apps

7. Project Retrospective

At the conclusion of the semester a retrospective will be held assessing the progress made during this term. Team members will submit relative documentation and hold a meeting with the project coach.

8. Feedback

Upon release of the initial MVP, there will be a free trial period for beta testers to use the app. Future development of the application will proceed according to this feedback.

- 9. Features freezes are planned to occur tentatively near the end of March 2026
- 10. The final product will be delivered 2-3 weeks after the planned feature freeze and will include the following hand off documents and deliverables
 - 3. Project handoff document
 - 4. Release of permissions to all dev environments
 - 5. Access to jira board (if requested)
 - 6. Official handoff and continuation of development docs

Major Deliverables

Designs:

- 1. Domain Model
- 2. Architectural model
- 3. Entity-relationship diagram
- 4. Major sequence diagrams
- 5. UI Mockups
- 6. Handoff document

Implementation:

- 1. MVP
 - a. Frontend
 - b. Backend API
 - c. Cloud
 - d. Al Model
- 2. Future releases
 - a. Attention to beta testing feedback
 - b. Continuation of bonus features

Communication

Documentation

The following Documentation supports our plan to communicate effectively with the project sponsor

Communication Plan

Each Monday by 4 P.M., the Sponsor Liaison will email the meeting agenda to the Sponsor and the Coach. The meeting agenda must include a standing Zoom link for if one of the meeting participants cannot make it to the meeting location.

https://rit.zoom.us/j/96514785443

Sponsor email:

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Initial Requirements

Documentation

John has provided a document with the requirements of the application that can be found below Requirements Doc

Epics and stories pertaining to these requirements can be found on our Jira Board.

Process Metrics

For the duration of the project we plan on using the following process and product metrics to guide us to complete the MVP: sprint velocity, earned value chart, effort by type of activity, defect density, test coverage, SUMI.

- 1. Keeping track of sprint velocity will allow the team to find optimal sprint capacity and help progress at a steady pace.
- 2. Documenting and tracking earned value charts and effort by type of activity can help the team manage and increase productivity. Earned value charts will track project performance in terms of both schedule and cost per effort.
- 3. Effort by type of activity will track where the team spends its time, helping identify bottlenecks.
- 4. Calculating and documenting defect density will help the team identify problematic areas in the project and can track improvement over time.
- 5. Implementing and documenting test coverages enables the team to find defects early and improve software quality. We strive to achieve 80% test coverage and believe this amount is sufficient to catch bugs and maintain product quality.
- 6. The team also plans to utilize the SUMI to record user responses, allowing the team to track metrics such as efficiency, satisfaction, learnability, control, and helpfulness. Our sponsor strives to make this the most user-friendly application of its type on the market, and leveraging SUMI will be pivotal in helping us achieve it.

Utilizing all of the metrics mentioned above will help the team improve process and product quality. Our main goal is to provide the sponsor with the MVP and tracking these metrics will help us achieve it.

Methodology: Scrum

Scrum master will be responsible for facilitating all scrum ceremonies. The following scrum ceremonies are designed to improve collaboration, productivity, and transparency within the team. All team members are expected to attend and participate in these ceremonies.

Sprint Planning

This ceremony will occur every two weeks and the sprint will start at the conclusion. During this ceremony, the team will discuss deliverables in the upcoming sprint, review and finalize items in the sprint backlog, and set sprint goals.

Daily Standup

This ceremony will be a quick five minute discussion that occurs at the start or end of meetings on Tuesday and Thursday. The team will go through the Jira board and each team member will give updates on their ticket(s). The goal of this meeting is to synchronize the team by sharing progress towards the sprint goal and identifying obstacles. An example format for the meeting can be: what I did yesterday, What I will do today, Are there any blockers?

Sprint Review

This ceremony will occur towards the end of the sprint and it will occur on Tuesday during the sponsor meeting. The goal of this ceremony is to review the team's progress, gather feedback, and confirm alignment with sponsor needs. During this meeting, team members will discuss the achievement of the sprint and show progress made to the sponsor.

Sprint Retrospective

This ceremony will occur at the end of the sprint and it will be on Thursday. The goal of this ceremony is for the team to reflect on the sprint. The team will share their thoughts on the sprint, what went well and what needs improvement.

Standard and quality practice

Code review agreement document has been created to set standards for code development. The document defines rules that ensure consistency and quality, all developers must follow the rules.

Tools

The team will utilize Jira and discord for task management and communication. Jira will contain all tasks regarding the project and it will be utilized to plan and run sprints. All team members are expected to update their tickets in Jira. Discord will be the team's main source of communication within the team.

Metrics and measurements

Sprint velocity will be used to measure and reflect the team's capacity and productivity. This metric will help the team forecast future work and it enables the team to effectively plan sprints.

Domain Model

