

Release Planning Document

COSC 4P02 – Software Engineering 2 (Winter 2024)

Professor- Naser Ezzati-Jivan

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Project Title: Social Media Post Generator

GitHub: <https://github.com/mc16dn/COSC-4P02-Group-Assignment/tree/main>

Project Members

Name	Role	ID	Brock Email	GitHub Username
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Maisam Anjum	Developer 3	6804298	ma19an@brocku.ca	Koorikdat

Project Management Tools

Miro was used as a collaboration tool by our management and development teams during meetings to build user stories. With these user stories, we developed the product backlog items and two sprints. We will use Jira to manage our product and sprint backlogs because it integrates with GitHub. We'll utilize readme.so to keep the readme file updated.

Brief Discussion

One of our concerns of this project's implementation is the decision tree and how we will go about implementing it. There are many decisions yet to be made but we predict this to be the most difficult aspect. Furthermore, getting the program to interface with more forms of social media, should we choose to do so, will also prove to be challenging. The GUI's layout will also likely be difficult to implement due to our lack of experience in developing user-friendly programs. We are, in general, very used to simply making a program that satisfies our assignments with little regard for usability, and this change in mindset might prove to be our biggest obstacle. We are, however, very excited to take this on and gain some true experience on program development. Both for our resumes and future experiences.

Product & Sprint Backlogs

User Epic

We would like to request a social media post generation program. It must be able to pull a post from Reddit and upload different permutations of a video reading out these posts via text-to-speech, they must be autonomously uploaded after receiving the user's desired permutation. For accurate comparison, we would like multiple channels with an independent environment for experimentation, these channels will upload different permutations of the pulled Reddit post. We need the program to be maintainable in a cost-efficient manner for future updates. These permutations could include audio, a gameplay clip in the bottom half, or a clip from a popular show or the like. We need the program to output reliable and accurate results based on user metrics collected from the channels. The metrics collected must include watch time, total clicks, total views, and total shares. It must be resistant to data leaks of both the user's information and the collected metrics. A user interface must be present, and it must be able to accept the input of the chosen permutations, the interface must also be usable, reliable, and the program must be able to output its results to this interface in a concise and readable manner. Lastly, we require easy access to the videos posted and data pertaining to these videos.

User Stories

As a user I want to be able to pull the desired Reddit post so I can use them in the videos	As a user, I want to be able to use text-to-speech to read the post so I can use them in the videos.	As an admin, I want to be able to view the execution log of the program so I can monitor it.	As a user I want to be able to view the metrics generated so that proper edits can be made.
As a user, I want to be able to fetch the latest posts from Reddit based on specified keywords so I can edit the desired posts.	As a user, I want to be able to autonomously upload videos through the program so I can have a more efficient experience.	As a user, I want to be able to generate multiple permutations of videos pertaining to a single Reddit post so I can make accurate decisions.	As an admin, I want the ability to view and manage the program's database so that I can make accurate decisions.
As a user I want to be able to know what my exact error was if one was made so that I can make the proper changes	As a user, I want to be able to stitch a video clip of my choosing to the video as a form of permutation so I can experiment.	As a user, I want to be able to use an efficient and readable UI so that I can make accurate inputs.	As a user, I want to be able to view the program's output in a readable and concise manner so that I can make accurate decisions
As a user I should be able to view the final version of the video so I can ensure its quality.	As a user, I want my data and metrics to be secure and anonymous so I can work without worry.	As a user, I want to be able to choose which channel to upload the video to so that I can collect accurate data.	As a user I want to be able to make program maintenance requests with minimal cost so that I can keep the program within my interest
As a user, I want to be able to customize the appearance and format of the video as a form of permutation so I can experiment.			

Product Backlog

The product backlog is a dynamic and prioritized list of features, improvements, bug patches, and other tasks that must be completed in a product. It functions as a comprehensive and ongoing library of tasks that the development team may work on in future iterations or versions of a software product. The product backlog is a key artifact in agile approaches, notably Scrum.

✓ SMPG-6 producing 18 video templates	TO DO ▾	- 
✓ SMPG-7 grabbing data from posted video	TO DO ▾	- 
✓ SMPG-9 grab video metrics from a given channel (watch time , total clocks, total view and total shares)	TO DO ▾	- 
✓ SMPG-35 Test that the metrics given returned from the video are sound and accurate	TO DO ▾	- 
✓ SMPG-8 Producing a decision tree to decide which video did the best by some given metric	TO DO ▾	- 
✓ SMPG-12 produce a method for the bot to upload to multiple different social platforms	TO DO ▾	- 
✓ SMPG-26 combine the video with the test from reddit and the voice to produce content that can be uploaded	TO DO ▾	- 
✓ SMPG-27 produce a server so that the bot can run for testing purposes	TO DO ▾	- 
✓ SMPG-14 make a user interface	TO DO ▾	- 
✓ SMPG-22 allow the user to upload video files to the user interface and work with the bot	TO DO ▾	- 
✓ SMPG-23 allow user to change voice with GUI	TO DO ▾	- 
✓ SMPG-24 allow user to change where they grab the reddit score	TO DO ▾	- 
✓ SMPG-25 allow user to manage the bot for a individual platform that will effect the other platforms that the bot is connected with	TO DO ▾	- 
✓ SMPG-28 test that the created content is sufficient for the users needs	TO DO ▾	- 
✓ SMPG-29 test that it works with different OS's	TO DO ▾	- 
✓ SMPG-30 Test test decision tree	TO DO ▾	- 
✓ SMPG-31 create database for video and metrics	TO DO ▾	- 
✓ SMPG-32 show video on gui	TO DO ▾	- 
✓ SMPG-33 show metrics of the video beside the GUI	TO DO ▾	- 
✓ SMPG-34 ensure that security is sound and that there are no data leaks	TO DO ▾	- 

First Sprint Backlog

Within the first sprint we want to set up the foundation of the project. This means that we need to put together all the initial components such that assembling them together moves smoothly. The building blocks involve researching technologies to see what is most effective and incorporating them at a basic level. The reddit API is integral to our project, and it serves as the base input, so by prioritizing that, we can move forward ensuring our project is viable, and this is also required for all future steps as it wouldn't be possible to integrate a voice bot, or video development pipeline without this starting point.

▼ Produce reddit story grabber 26 Jan – 9 Feb (8 issues)			0 0 0	Start sprint	...
Allows the bot to grab stories from reddit					
<input checked="" type="checkbox"/> SMPG-36 research how to grab and read stories from reddit	IN PROGRESS ▼	-	MA		
<input checked="" type="checkbox"/> SMPG-1 register with reddit api	IN PROGRESS ▼	-	MA		
<input checked="" type="checkbox"/> SMPG-2 use reddit api to pull from given url	IN PROGRESS ▼	-	MA		
<input checked="" type="checkbox"/> SMPG-3 fetching from random 10 top posts from a given subreddit	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-5 sanitizing user posts for Censorship and security	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-4 make the post that is grabbed a manageable length and does not cut off any part of the story	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-11 research which subreddits are the best to grab stories from	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-37 allow the reddit grabber to grab stories from different reddit	TO DO ▼	-			

Second Sprint Backlog

▼ voice of the reddit bot Add dates (7 issues)			0 0 0	Start sprint	...
<input checked="" type="checkbox"/> SMPG-15 make the voice of the bot read any text	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-16 make censorship for the voice so that it avoid inappropriate words	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-17 test the censorship and voice so that there is no errors involved	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-18 integrate the voice with the reddit grabber so that it can read the text	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-19 test the integration so that there is no errors because of the implementation	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-20 develop multiply different options for the voice (around 3)	TO DO ▼	-			
<input checked="" type="checkbox"/> SMPG-21 allow easy switching between voices and test that it doesn't cause errors	TO DO ▼	-			

Contributions

Basel:

- Created User epic.
- Contributed to user stories.
- Collected the team's thoughts.
- Contributed to the Release Planning doc editing.

Rifat:

- Contributed to user stories,
- Formatting the Release Planning doc
- Managing Miro
- Updating readme file
- Assisting Basel with User Epic decisions.

Hevar:

- Made the final product and sprint backlog decisions.
- Communicated with Basel to ensure accuracy in the report.
- Contributed to the research material that needs to be looked on to ensure the success of the project.

Matthew, Raymond, and Maisum:

- Assisted Hevar with research.
- Assisted with making decisions regarding the program's implementation.
- Assisted in discussing the risk management of the project.

Meetings: We decided on a biweekly sprint and a meeting before, after, and in the middle of each sprint.
