CEN 4010 Principles of Software Engineering

Spring 2021

Milestone 1 Project Proposal

Team 5

Project:

"Chatflix"

A community where television and silver screen enthusiasts can discuss their favorite and least favorite highlights of the television shows and movies they are watching.

Team Members:

Verneshia Persaud

Jason Abdool

Viviana Joubert

Maksym Mostovy

Monica Silvestri

Vpersaud@fau.edu
jabdool2016@fau.edu
vjoubert2019@fau.edu
mmostovy2019@fau.edu
msilvestri2018@fau.edu

February 16, 2021

Table of Contents

Revision Summary	3
Executive Summary	4
Competitive Analysis	5
Data Definition	7
Overview, Scenarios, and Use Cases	9
High-Level Functional Requirements	11
Non-Functional Requirements	13
High-Level System Architecture	14
Team Roles	14
Checklist	15

Revision Summary

Date	Revision History	Revision Class	Comments
16-FEB-2021	0.1	New	Released new document

Executive Summary

Suffering from a Netflix "hangover'? We know post-binge-watching blues is real, especially in the modern age of quarantine. After investing so much time into a captivating show and immersing into a reality outside of your own, a wave of emptiness washes over when you realize you had just finished watching the final episode. Filled with so many questions, comments, and concerns about the show and an urge to further discuss, there must be an outlet to fill this new-found void. We know it's all you can think about for days post-binge, hence our development of Chatflix!

Chatflix will be a social-networking website that will make it easy for you to connect and share with virtually anyone. The main concept is to build an online community of avid bingers and movie enthusiasts alike to openly chat about any show or movie. Not only will be this be a fandom, but users will also be able to create their own customizable profile, add friends, subscribe to their favorite show or movie's page, stay up to date with an activity feed, leave reviews, keep track with a watch-list queue, interact in a watch party and more! The purpose is to build a broad social network with emphasis on creating a sense of connection and interaction amongst fellow fans of the film entertainment industry.

Competitive Analysis

Chatflix	IMDB	Rotten Tomatoes	Reddit
Highly Customizable Profile Page	Static Profile Page	Static Profile Page	Static Profile Page
Discussion Page for related topics, with a focus on pop culture, i.e., communities or fandoms.	Discussion Page for related topics	Discussion Page for related topics	Discussion Page for related topics
Quizzes/Interactive	Quizzes/Interactive	Quizzes/Interactive	Quizzes/Interactive
Content	Content	Content	Content
News about New	News about New	News about New	News about New
Releases	Releases	Releases	Releases
User Watch-lists	User Watch-lists	User Watch-lists	User Watch-lists
Shows User Activity	Shows User Activity	Shows User Activity	Shows User Activity
Status (ie,	Status (ie,	Status (ie,	Status (ie,
online/offline)	online/offline)	online/offline)	online/offline)

Within the social media market, there is little room for change when considering overall features, but a focus on target audience is what makes and breaks a competitive social media platform. For example, Facebook's competitor Instagram has similar concepts of user posts, profiles, and activity feeds, but the difference is seen by the sites' userbase. Facebook hosts users typically older than 30 while the typical Instagram user is 30 or younger. With the same principle of focusing on an audience rather than features, Chatflix aims to replace media giants like IMBD and Rotten Tomatoes by focusing on pop culture and simplistic modern design. Chatflix can

appeal to many teens and young adults as a platform that promotes internet pop culture with a focus on movies and shows.

Data Definition

<spoiler> An element that, when placed around a body of text, prevents the

text from being displayed unless the user hovers their cursor over it.

The amount of time that the public has access to the website when **Availability**

maintenance is not being performed.

Avatar A figure or icon that can be selected and personalized to represent a

person.

Binge-Watching The practice of watching multiple episodes of a television program or

multiple movies in rapid succession, typically by means of digital

streaming.

Community Page An index of posts relating to television and film media.

A subculture of enthusiasts who share a common interest. Fandom

Forum A place, meeting, or medium where ideas and views on movies and

television shows can be exchanged.

Maintainability The process of updating the website to prevent any future errors.

Media Quiz Interactive content that tests the user's knowledge on a television

series or movie.

Meme A humorous image, video, piece of text, etc., that is copied (often with

slight variations) and spread rapidly by internet users.

The process of subdividing the software into separate components,

Moderator A person who monitors the online discussions.

Modular

Programming e.g., forum, profile page, activity feed.

Performance The capabilities of each action performed on the website.

Content that is shared through a user's profile. Post

The amount of time that the website is available to the public without Reliability

any errors.

Response The result of each action performed on the website.

Scalability The process of allowing the website to accommodate a sudden

increase in users.

SubscribeTo arrange to receive notifications regularly about discussions relating

to a favorite television series or movie.

Security The process of protecting a user's information and identity when

using the website.

Theme A collection of related images that decorate a user's profile page.

Thread A series of replies to a single post.

Usability The criteria that determine how easy the website is to use for a

person.

User A person who can create discussion posts and manage their individual

profile.

Verified User A person that passes security measures and identity verification to

ensure validity, e.g., producers, director.

Watch-list A set of television series and/or movies that have been watched in

their entirety.

Watch-party A social gathering for the purpose of viewing a movie or an episode of

a television series.

Overview, Scenarios, and Use Cases

Jan, a twenty-four-year-old college student, just finished binge-watching all two seasons of *The Mandalorian*. Wanting to connect with their peers during the isolation of COVID Jan open Chatflix on their phone web browser, Safari. After navigating to their profile, Jan adds season one and two of *The Mandalorian* to their "seasons completed" watch list. After Jan's watch list is updated, they click on the title of the newly added *Manelorian* series to navigate to related discussions of their new favorite show. Jan creates a post with an image of a meme with the character in the season finale, captioned with a question to everyone in the community for their opinions related to the ending. After receiving many likes on their post, Jan gets a reply from StarWarsFan76, <spoiler> "I'm happy my favorite character didn't die in the end!" <spoiler>. This use case demonstrates the ability for the user to access a customizable profile, adding watched films to their watch lists, interacting with the community of a film or show, ability to comment on other user's post, and spoiler tags to hide potential spoilers for others.

Mary a sixteen-year-old high school student loves watching *Game of Thrones* and knows everything about the show. They took every quiz possible on the Chatflix community page and got every question right. As a reward, Mary gets a profile avatar, background themes, and a custom emoji package from the show. Their homepage is flooded with news related to *Game of Thrones* after subscribing to the Chatflix community news tab. They are anxiously waiting for the next episode, and even subscribed to notifications about the next upcoming episode! This use case shows an overview of planned user profile customization and interactive quizzes.

Additionally, it illustrates the capability of subscribing to news feeds for related content about a show or movie, and ability to be notified through email for new releases.

High-Level Functional Requirements

Main Pa	age
FR01	The system shall enable viewers to see discussions in date order (Descending order, starting from most recent to previous).
FR02	The system shall display the following in each forum thread: The title, name and picture of user that started the thread. The number of comments, e.g., replies. The date of last post, and the name of user who made the last post. The discussion that is trending.
FR03	The system shall allow users who are logged in to create threads.
FR04	The system shall allow use of tags to mark content keywords.
Discuss	ion Page
FR05	The system shall enable users to view the current show/movie in the thread chosen.
FR06	The system shall allow users who are logged in to reply to threads.
FR07	The system shall allow users who are logged in to rate the discussion, e.g., like or dislike.
FR08	System must have administrator roles to monitor user content.
Search	Bar
FR09	The system shall allow users to search for a show or movie by title. The results should display a brief description of the television series or movie of, its ratings, and related discussions.
Registra	ntion and Login
FR10	The system shall authenticate users before logging them in.
FR11	The system shall require user agreement to Terms & Conditions when user account is created.

Profile I	Page
FR12	The system shall allow users to update their profile with avatars or icons and change their profile background color.
FR13	The system shall allow users to view activity feed of shows and movies they have watched and shows and movies their friends have watched.
FR14	The system shall allow users to add friends.
FR15	System shall allow users to leave comments on profile page.
Privacy	Settings
FR16	The system shall allow users to make their profile public or private.
FR17	The system shall provide the option to show or hide friends list.

Non-Functional Requirements

Performance		
NFR01	The system's home page supporting 3000 users per hour must provide a response time of 3 seconds or less.	
NFR02	Interactions with the navigation bar should take one second or less.	
NFR03	Searching the catalog must take one second or less.	
Capacity and Scala	bility	
NFR04	The system must store data effectively, and storage must increase as the system gets used more often.	
NFR05	The system must be able to process 1000 queries per minute.	
Availability		
NFR06	The system must be available 91% during the month.	
Maintainability		
NFR07	Latest standards and designs must be used for the system's base architecture. Common coding styles must be used.	
NFR08	The system must implement modular programming.	
Recovery		
NFR09	The system must backup data every hour. Backup must take one minute or less.	
Security and Privacy		
NFR10	The system must use encryption to store data securely.	
NFR11	Users must be logged in to see private posts and profiles.	

Mobility	
NFR12	The system must support the following browsers: Chrome Safari Firefox

High-Level System Architecture

The system will use PHP, Python, JavaScript, and SQL for back-end framework; and HTML and CSS with a Bootstrap for front-end user interface. An unofficial Netflix API will be used to acquire Netflix data.

Team Roles

Scrum team:

Product Owner: Maksym **Scrum master:** Verneshia

Development team:

Front-end: Monica (lead), Viviana, Verneshia

Back-end: Maksym (lead), Jason

QA: Verneshia, Monica

GitHub Master Monica

Checklist

Task	Status
Team decided on basic means of communications.	DONE
Team found a time slot to meet outside of the class.	DONE
Front and back end team leads chosen.	DONE
Github master chosen.	DONE
Team ready and able to use the chosen back and front-end frameworks.	ON TRACK
Skills of each team member defined and known to all.	DONE