



BackLogger

Spring 2024 Capstone II

Senior Project

Team Members: Fernando Collante (Team Lead), Lorena Miranda (Team Assistant), Luis Venegas, Andres Vazquez, Brandon Torrens

Product Owner: Fernando Collante

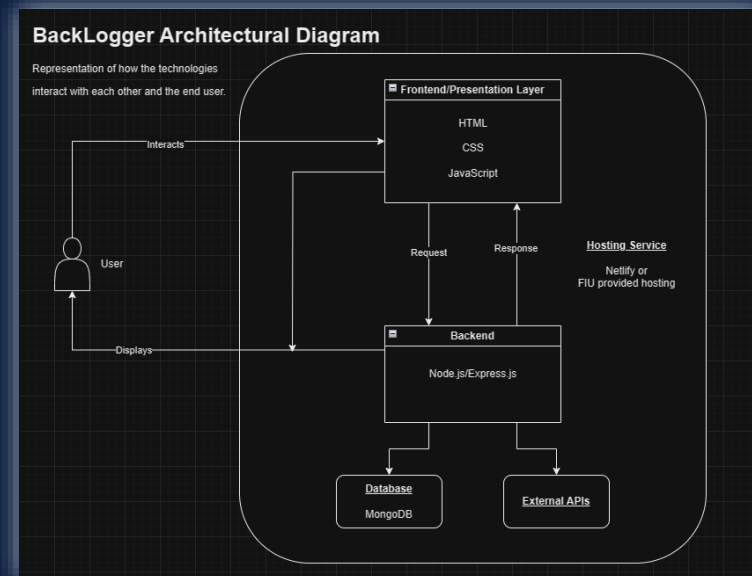
Professor: Dr. Masoud Sidjadi



What is BackLogger?

- BackLogger is an engaging media consumption tracking app designed to provide a fun and interactive method for users to track and share their progress across all types of media. Whether you're looking to monitor books, movies, or games, BackLogger keeps you organized and connected.

This diagram illustrates the architecture of BackLogger. The user interacts with the frontend presentation layer, which was constructed with HTML, CSS, and JavaScript, to receive and display data. The frontend communicates with the backend, developed with Node.js/Express.js, for processing requests and responses. Data storage and management are handled by MongoDB, and external APIs provide additional functionalities. The entirety of the project (front and backend) then being hosted on a service such as Netlify or FIU provided hosting.





Development Goals

- Emphasize a cohesive and interactive UI/UX design.
- Ensure organized data structures and optimized backend functionalities.
- Maintain modularity for future project expansion.

Project Goals

- Streamline media management with a user-friendly interface.
- Provide users access to all media options in one place.
- Enhance exploration of media with the help of other user's lists.





Crafting BackLogger: Our Design Journey

- Scrum Framework: Our project embraced the Agile Scrum framework, guiding us through 6 development and 1 administrative sprint each being 2 weeks in length. This approach fostered a dynamic and flexible development environment.

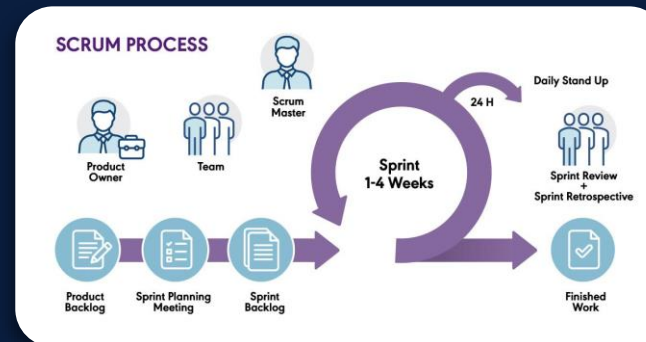


Fig. 1 - Scrum Process from (2024, March 24). PM-Partners.
<https://www.pm-partners.com.au/insights/the-agile-journey-a-scrum-overview/>

- Sprints 1 & 2: Kicked off with a focus on unifying our design vision and selecting the technologies for our project. It was a crucial time for aligning our goals and diving deep into research to ensure we chose the best tools for BackLogger.
- Sprints 3 to 5: These sprints were the meat of our development phase, where we put our plans into action. From coding the foundation of our UI/UX to adding more complex features such as account creation, each sprint brought us closer to realizing our vision.
- Sprint 6: Dedicated to integrating the frontend and backend. This was where we saw the pieces come together, ensuring seamless communication between different parts of our application.
- Sprint 7: Focused on final documentation and preparing to showcase our project. This sprint was about polishing our work and ensuring everything was in place for a successful presentation.



Technological Stack

Front End

- Utilized basic HTML, CSS, and JavaScript for their accessible learning curve, enabling team members to independently and effectively comprehend these technologies.



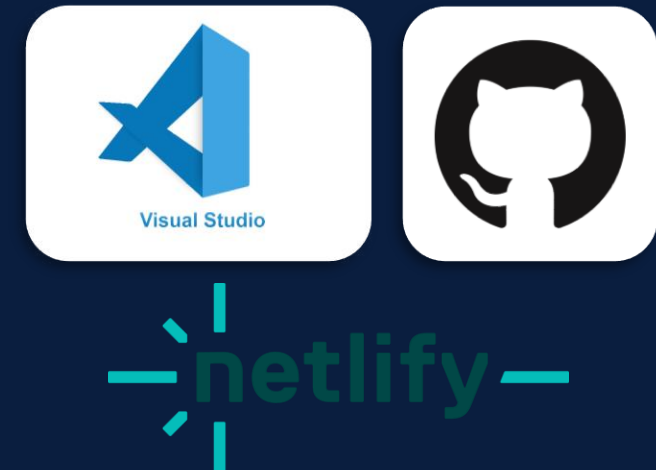
Back End

- Powered by Node.js/Express.js to maintain the some of the same coding language as frontend and MongoDB as our database backbone due to the team's familiarity with the technology.



Tools and Hosting

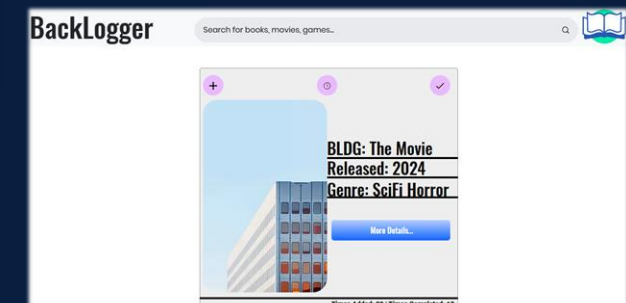
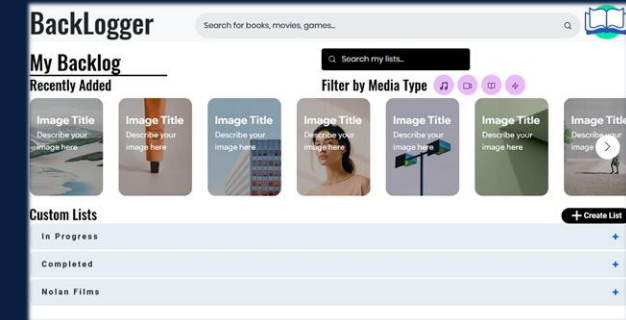
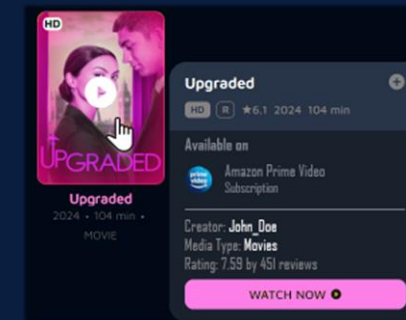
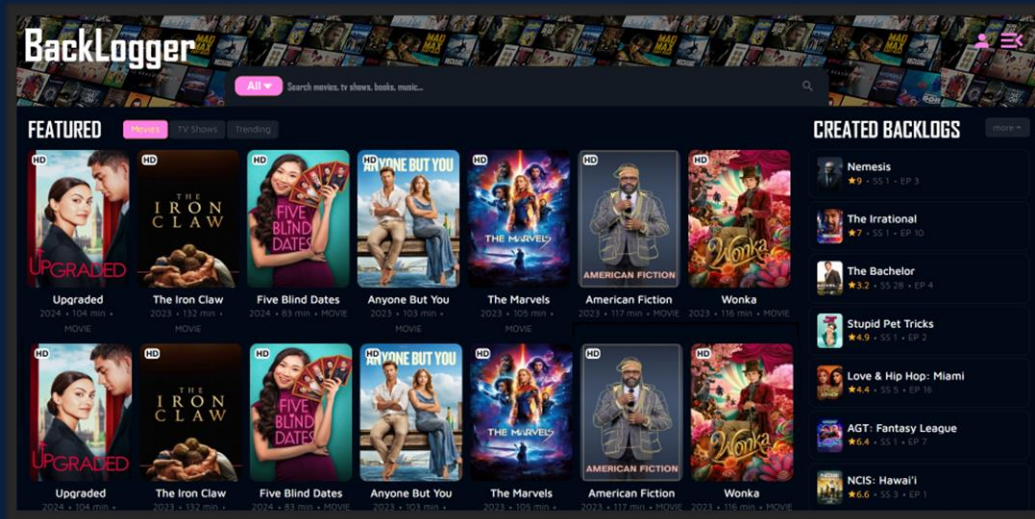
- Developed in Visual Studio Code and hosted on Netlify, with GitHub for version control.





Frontend Development

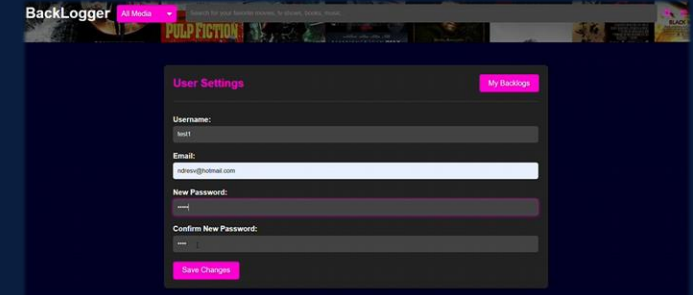
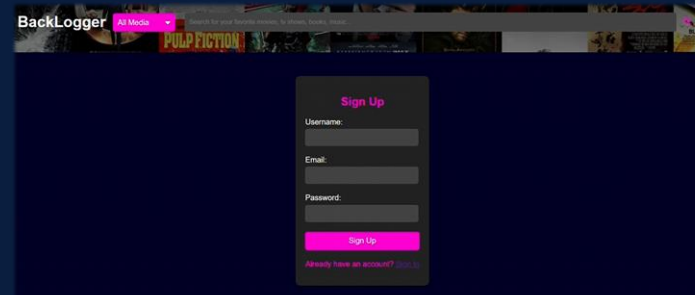
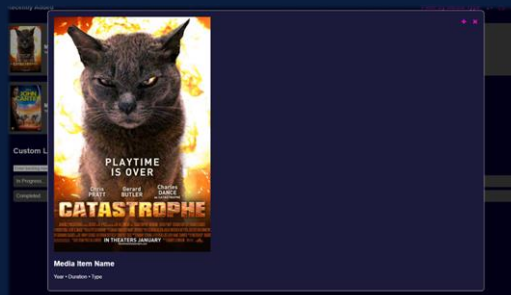
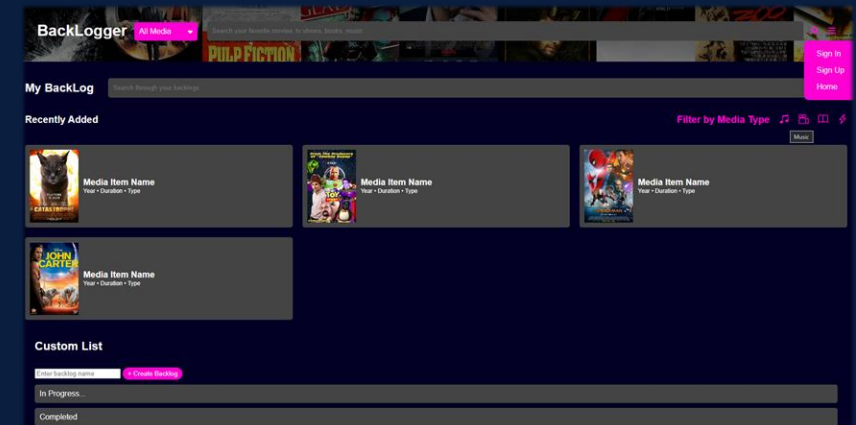
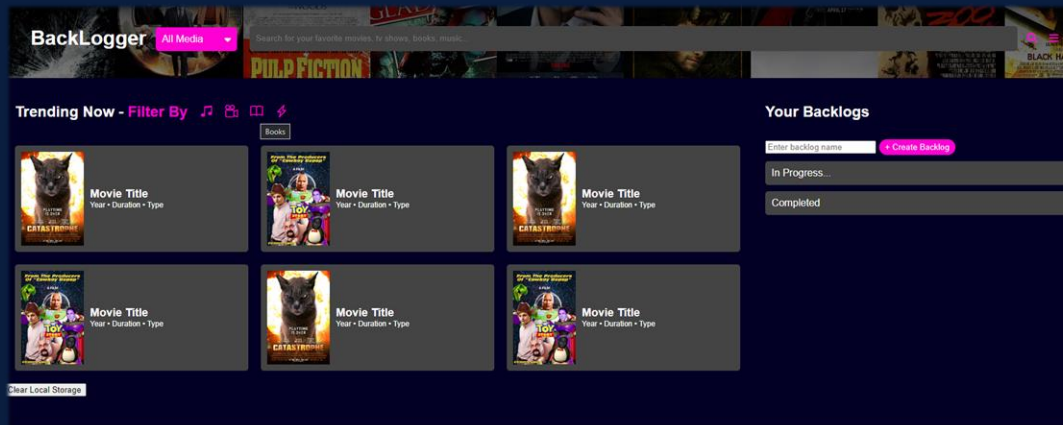
- Team: A collaborative effort by Andres Vazquez, Lorena Miranda, and Fernando Collante.
- Design to Development: Starting with mockups created in Wix and Adobe Photoshop, we refined our designs through iterative discussions, eventually translating these ideas into functional HTML/CSS and JavaScript.





Frontend Development Cont'd.

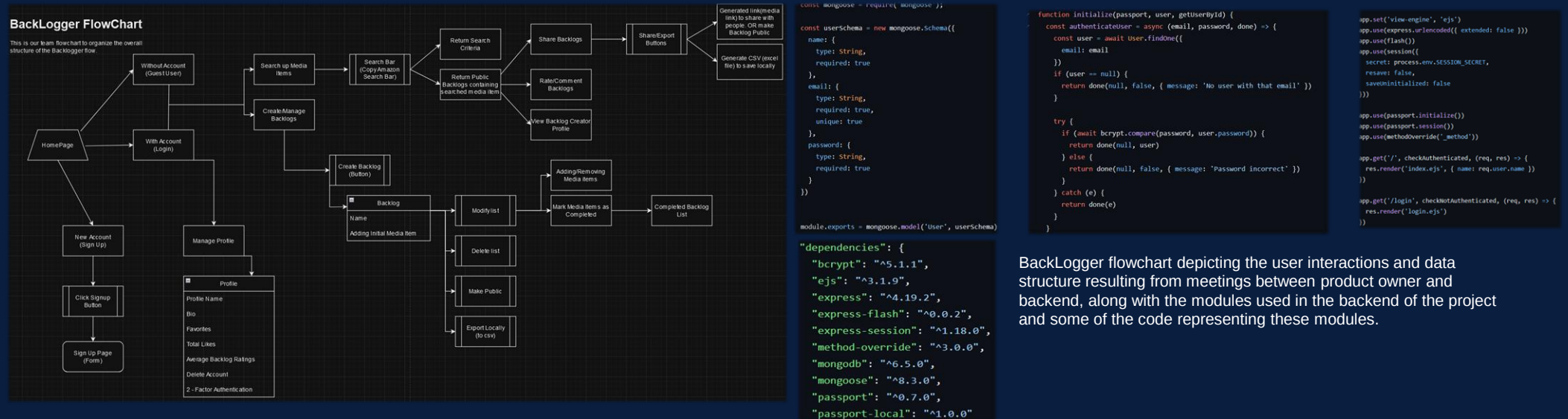
- Interactivity and Functionality: Our focus then shifted to implementing features such as list creation, media filters, and menu navigation to enhance user engagement.





Backend Development

- Team: A collaborative effort by Brandon Torrens and Luis Venegas.
- Foundations: Collaborated closely with the product owner to define data structures and interactions.
- Implementation: After selecting our technologies, we established a development environment, initially focusing on profile creation and user account management.



BackLogger flowchart depicting the user interactions and data structure resulting from meetings between product owner and backend, along with the modules used in the backend of the project and some of the code representing these modules.



Testing and Integration

- UI/UX Responsiveness Testing:
 - Before the final integration, we conducted thorough tests to ensure that our UI/UX designs were not only cohesive but also responsive across different devices and platforms. This step was crucial in guaranteeing a seamless user experience.
- Backend Module Testing:
 - Alongside UI testing, the backend team rigorously tested the modules to ensure data integrity and reliable performance of account creation and management functionalities. This process helped in identifying and rectifying any potential issues before the integration.
- Final Integration:
 - In our final development sprint, we focused on merging the refined user management and account creation features with the frontend. This phase was critical in ensuring that all components worked together harmoniously, providing a cohesive user experience.



Shortcomings

- Functionality Gaps:
 - Frontend: Incomplete modal implementation (design and functionality).
 - Backend: Incomplete implementation of API calls for media titles.
- Learning Curve: The learning curve for new technologies impacted our development timeline.

Wishlist/Future Improvements

- Introduce import/export capabilities for lists.
- Achieve full functionality in API calls across all media types.
- Enhance modal design and functionality for a better user experience.
- Develop robust customization options for profiles and site in general.



Summary

- Foundation: We've built a strong base for BackLogger, diving into well established technologies and Agile practices. Our use of Scrum has streamlined our work and boosted teamwork.
- Growth: The project is set for future expansion thanks to the use of technologies with low learning curves along with clear and concise documentation of our journey and purpose.
- Looking Ahead: With our newly acquired skills, we're ready to tackle more complex challenges (such as working with frameworks) and be useful members to any development team. We're excited to use what we've learned in our future projects.