WCU

FEEDSYNC CLOUD RSS READER
PROJECT DELIVERABLE 1

Spring 2025 CSC468-01: Introduction to Cloud Computing

Team Name: CloudVision

Team Members:

- Ellis Weaver-Kreider
- Yanxi Wei
- Gustave Johannesen
- Chris Ross

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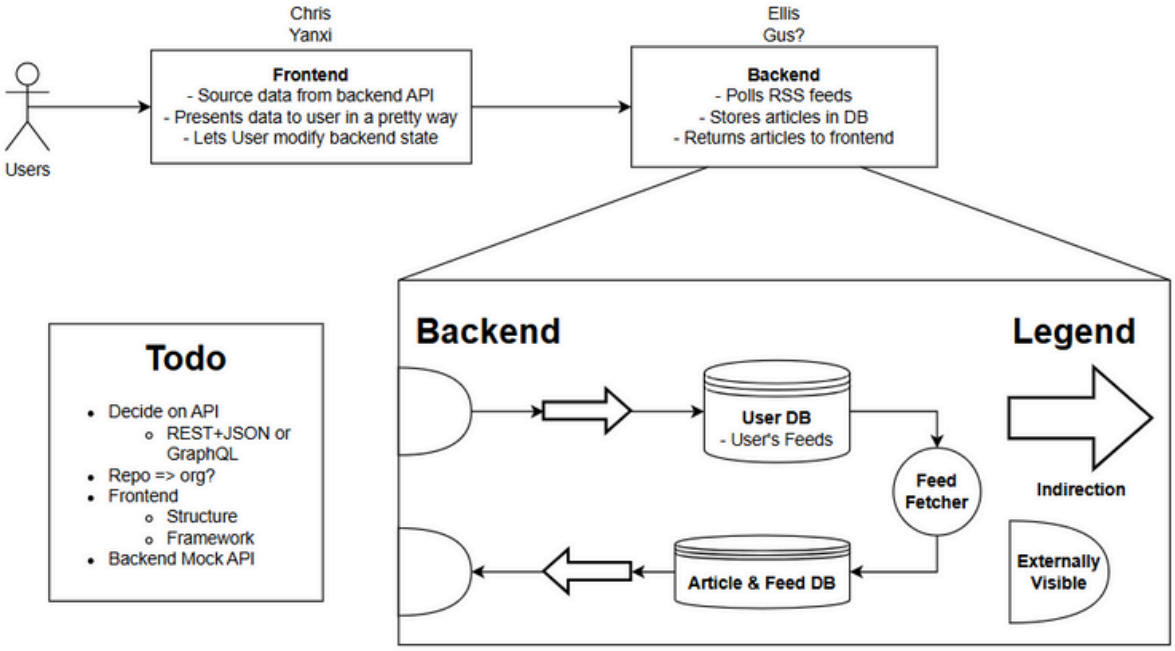
Chapter 1: Project Vision

The goal of this project is to develop an RSS Reader that allows users to subscribe to RSS feeds, retrieve articles, and display them in a user-friendly format. The system consists of a frontend interface for users to interact with and a backend service that manages data retrieval, storage, and processing.



1.1 Introduction

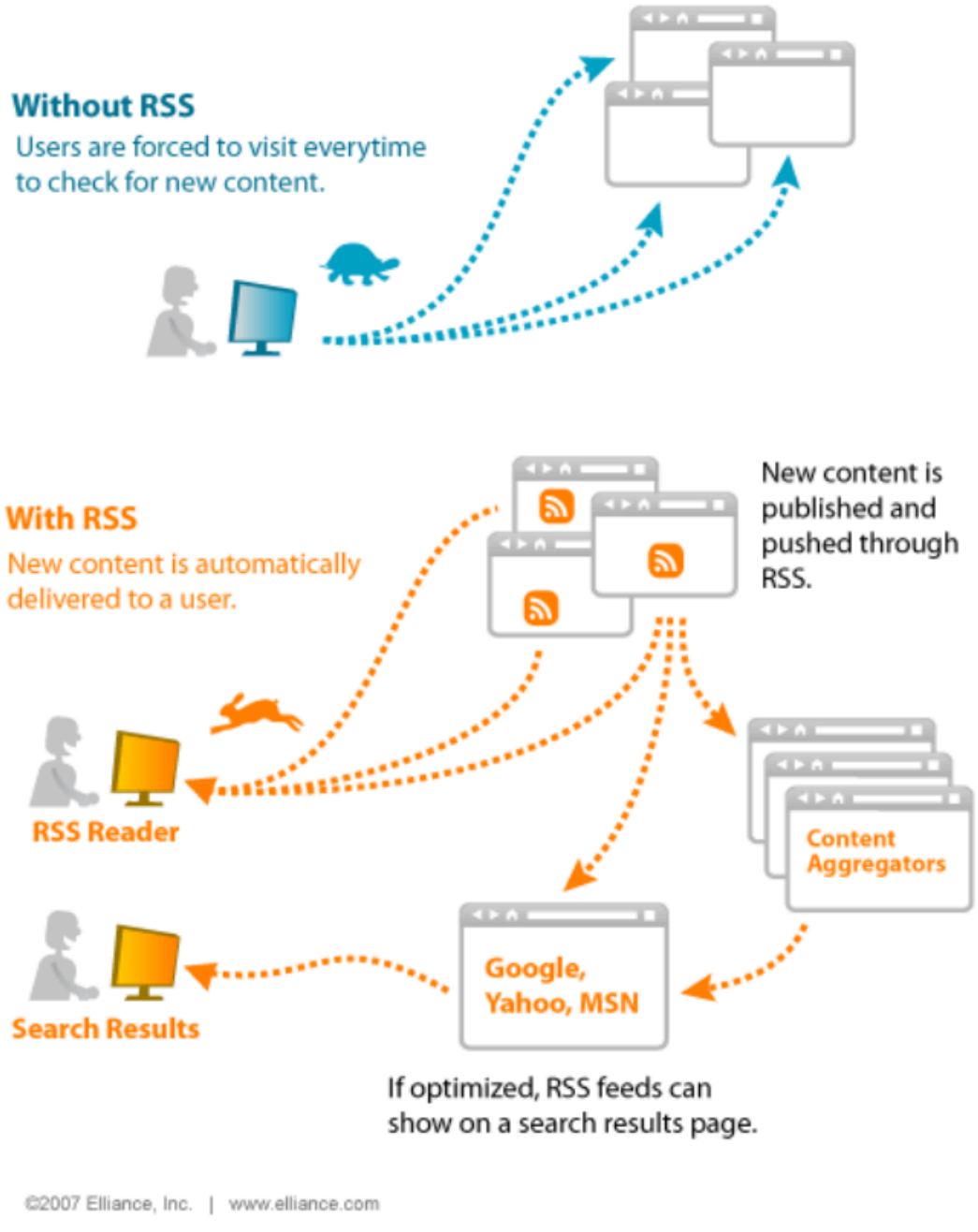
- Many sites publish event feeds with RSS & Atom feeds
- These feeds are machine-readable, not human-readable
- A feed reader presents these feeds in a digestible way to humans.
- An aggregator takes multiple feeds and combines them, such as the Linux Kernel Planet

1.2 High-Level Overview

- The system is divided into two main components:
- Frontend (Chris & Yanxi)
- Fetches data from the backend API
- Displays articles to users in a structured format
- Allows users to interact and modify their feed preferences
- Backend (Ellis & Gus)
- Polls RSS feeds and stores articles in a database
- Provides a REST API to deliver data to the frontend

1.3 Key Features

- Allow users to register a list of RSS & Atom feeds
- Periodically fetch new articles/entries
- (Potentially) Export aggregate feed to users
- (Potentially) Individual user accounts w/ SSO login



Chapter 2: Implementation Plan

2.1 Technology Stack

- Frontend: Plain HTML, CSS, JavaScript
- Backend: REST API, Database
- Database: User DB and Article/Feed DB
- Cloud Platform: CloudLab for deployment
- Version Control: GitHub repository (public)

2.2 System Components & Responsibilities

- Frontend: Developed by Yanxi and Chris
- Fetches data from the backend API
- Displays user-friendly UI
- Allows user interaction (subscription, feed management)
- Backend: Developed by Ellis and Gus (if applicable)
- Fetches RSS feeds
- Stores data in the database
- Provides REST API endpoints

2.3 Development Roadmap

- Week 1-2: Define requirements, set up GitHub repository
- Week 3-4: Develop frontend wireframes and backend API design
- Week 5-6: Implement database and core functionalities
- Week 7-8: Testing and deployment
- Week 9: Final debugging and documentation

2.4 Challenges and Risk Management

- Potential risks in project execution
- Contingency plans for technical challenges

Yanxi Wei

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EDUCATION

West Chester University of Pennsylvania, West Chester, PA
Bachelor of Science in Computer Science, Graduation: Spring 2025
GPA: 3.9/4.0

Relevant Coursework :

- Computer Science I, II & III
- Foundations of Computer Science
- Data Structures and Algorithms
- Computer Systems
- Computer Security
- Data Science
- Digital Image Processing
- Program Lang Concepts/Paradigm
- Modern Web Applications

Honors and Achievements

- Dean's List, College of the Sciences and Mathematics (Fall 2024)
- Inducted Member of Upsilon Pi Epsilon (UPE) – The International Computer Science Honor Society (Spring 2025)

Technical Skills

- Programming Languages: Java, Python, C
- Web Development: HTML, CSS, JavaScript, REST APIs
- Cloud Technologies:Docker, CloudLab, Virtualization, Containerization
- Tools & Platforms: GitHub, IntelliJ IDEA, PyCharm, VS Code

ACADEMIC PROJECTS

Email Classification and Spam Analysis System, Team Project (Fall 2023)
Role: reader and Parser- Made CSV parser and reader.
Developed a CSV parser and reader for a spam classification system using a bag of words approach. Assisted in training the classifier to identify common words and phrases in spam and ham emails, and calculated accuracy and Euclidean distance metrics.
Worked with team members to integrate CSV reading with algorithm development for classification, ensuring clean data processing and accurate results.

Obesity Analysis Based on Socioeconomic Factors, Personal Project (Fall 2024)
Role: Data Analysis and Visualization
Conducted statistical analysis on the relationship between obesity rates in the U.S. and socioeconomic factors such as age, income, education level, and gender. Utilized the BRFSS dataset from the CDC and applied regression models, ANOVA, and interaction effect analysis to evaluate key influencing variables. Performed data preprocessing, statistical modeling, and visualization to derive insights for public health interventions, ensuring data-driven conclusions.

Additional Information

- Languages: English (Fluent), Chinese (Native)
- Interests: AI technology, Cloud Computing, Web Development, Data Science