CEN4010 – Principles of Software Engineering.

Fall 2021

Relay

Group 10 – Emanon.

Team members

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Milestone 5 – Final Project Portfolio.

December 6, 2021

Project URL: <https://lamp.cse.fau.edu/~cen4010_fa21_g10/relay/>

Revision Dates

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| --- | --- | --- |
| Revision | Date | Changes |
| 1 | 12/2/2021 | Created Initial Document |
| 2 | 12/6/2021 | Added Project Screenshots |
| 3 | 12/6/2021 | Listed more contributions. Adjusted post project analysis and lessons learned sections |
| 4 | 12/6/2021 | Added Google Analytics Plots. Mentioned commenting as unfinished feature. |
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1. **Product Summary**
   1. **Name of Product:** Relay
   2. **Uses and Benefits**

Relay is intended to be a social media site that is able to provide stronger and more personal connections between its users than other social media sites. This project was created in response to the limitations that social distancing has imposed upon connecting with friends and family. Relay’s intent is to make users feel more connected to each other through real time conversations because we understand the value of talking to another person directly. Additionally, we provide privacy options that let users individually control who can see each of their posts, ensuring that private details remain private. Additionally, Relay’s different options for post types adds convenience so that users can share anything that’s on their mind at any time.

* 1. **All Major Committed Functions**
     1. **Create Accounts –** Users must create an account to use most features of the site. This requires a username, password, email, first name and last name.
     2. **Create Post –** Users with accounts will be able to share text and image content with other users of the site and control who sees their posts.
     3. **Search –** Users will be able to search for posts and other users by typing search terms into a search bar. They will be provided with a list of matching users and posts upon clicking search.
     4. **Add Friend –** Users will be able to send friend requests to other users. Upon approval by the other user, the two users will become friends and unlock certain privileges for the other user’s content.
     5. **Interact with Post –** Users will be able to like posts and reply to them with comments.
     6. **Chatrooms** **–** Users will be able to talk with their friends in real-time using private chatrooms.
     7. **Manage Friends –** Users will be able to set permission levels for each of their friends that determine which posts the friend is able to see on the site.
  2. **Unique Features of the product**

The main unique features of the website are the Chatroom and Friend Management features. Chatrooms are intended to provide a better connection between users than most other social media sites by letting users privately communicate in real time. The Friend Management features let users give users more control over who can see their posts than similar sites. We hope that these features come together to provide better connections between users while maintaining a high level of privacy.

* 1. **URL****:** <https://lamp.cse.fau.edu/~cen4010_fa21_g10/relay/>

1. **Milestone Documents**
   1. **Milestone 3 (Double-click to open):**



* 1. **Milestone 4 (Double-click to open):**

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* 1. **Summary of instructor’s feedback of Milestones 3 and 4.**

Our feedback on Milestone 3 was simply that we did not include a link to the project demo in our report or our team’s webpage. We addressed this issue by both adding a link to our project on our team’s webpage and adding the URL to our report. For Milestone 4, We were told that we should add at least two paragraphs to our Product Summary discussing the uses and benefits of our product before listing the committed functions and unique features of our product.

1. **Product Screenshots**
   1. **Community Feed**

**Graphical user interface, application

Description automatically generated**

* 1. **Personal Feed**

**Graphical user interface

Description automatically generated**

* 1. **Create Account**

**Graphical user interface, application

Description automatically generated**

* 1. **Log In**

**Graphical user interface, application

Description automatically generated**

* 1. **Profile**

**Graphical user interface, application

Description automatically generated**

* 1. **Manage Friends**

**Graphical user interface, application

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* 1. **Create Post**

**Graphical user interface, application

Description automatically generated**

* 1. **Expanded Post**

**Graphical user interface, application

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* 1. **Chatrooms**

**Graphical user interface, application

Description automatically generated**

1. **Google Analytics**

**Graphical user interface, application

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**Graphical user interface, application

Description automatically generated**

1. **Team Member Contribution**
   1. **Andrew Sexton. Contribution Points: 21 Github Commits: 78**

Andrew Sexton was Team Lead and managed the group Github repository and Jira workspace. He led team meetings, guided the project’s direction, and assisted with some of the back and front-end development, including implementing the chatroom feature.

* 1. **Maxon Corvil. Contribution Points: 21 Github Commits:31**

Maxon Corvil was Front-end Lead and did the HTML and CSS design for nearly all of our site. He also made most of our Balsamiq mockups with only minor edits from other team members. Although we could not implement it on the LAMP server, he did make a working Email verification / 2FA system as well.

* 1. **Ashley Davis. Contribution Points: 21 Github Commits: 16**

Ashley Davis was a Back-end Developer and implemented the image and picture uploading feature of our site. She also implemented the search feature and helped with testing and bug fixes for the other features of the site.

* 1. **Patrick Messina. Contribution Points: 16 Github Commits: 4**

Patrick Messina was a Front-end Developer and helped with testing the site, including writing the test plans.

* 1. **Michael Niebauer. Contribution Points: 21 Github Commits: 27**

Michael Niebauer was Back-end Lead and created our initial prototype that laid the foundation for the Create Account, Login, Feeds, Create Post, and Friends features. Besides this, he also did most of the php including database connections and helped develop these functions into their final state.

1. **Post Project Analysis**

The primary challenge that our team faced was with planning and time management, primarily towards the end of the semester. Early on, we discussed our plan for what our product would be and only made minor changes to this through the semester. This allowed us to work mostly independently while updating the group via WhatsApp and Github commits. We would also meet a week or two prior to each milestone to discuss responsibilities for each section of the deliverable. This worked well until late in the semester when pressure from external commitments caused me to delay scheduling our meetings until a few days before this milestone, leaving us with a tight deadline. The only other noteworthy challenge is that Patrick generally contributed less than the rest of the team for our first few milestones. I think that this is partially because we organized these milestones by volunteering to do certain sections, which did not leave him with any specific task to accomplish for milestones 1 and 2. We addressed this issue on later milestones by ensuring that he had tasks in each milestone that he was responsible for. I believe that we could have avoided the first challenge by committing to a regular and firm schedule for meetings rather than the flexible schedule of meeting a week or two prior to the milestone’s deadline and frequently communicating via WhatsApp. I think the second challenge was addressed correctly but should have addressed it much earlier in the semester.

* 1. **Finished Features**
     1. **Create Account and Log In**
     2. **Create Post**
     3. **Search**
     4. **Friends, Friend Requests, Friendship Levels**
     5. **Interact with Post - Like**
     6. **Chatrooms**
     7. **Manage Friends**
  2. **Unfinished Features**
     1. **2FA and Account Verification** We were unable to implement this feature due to being unable to send emails via FAU’s LAMP server. Maxon was able to get these features working from his testing environment, but we ultimately had to leave it out.
     2. **Interact with Post – Comment** We were unable to finish this feature due to it taking longer to implement other, higher-priority features than we anticipated. We decided not to finish this feature since it was only priority 2 and we needed to focus our time on other things.
  3. **Lessons Learned**

One of the most important lessons we learned was the importance of planning and time management. As previously discussed, we had some issues towards the end of the semester with planning our project to give us enough time to accomplish our goals. This is in contrast to earlier in the semester when we were progressing at a solid rate. The process of creating documentation in each of our milestones was also very helpful in fleshing out many of our project’s implementation details and helped us develop an appreciation for the value of documentation.