

A hand with red-painted nails holds a blue smartphone. The screen shows a blue speech bubble with the word 'TALK' and a red speech bubble with a white dollar sign. The background is a vibrant, comic-style illustration with green and yellow diagonal stripes and a red polka-dot pattern. A large white speech bubble with the word 'PING!' in red is on the left, and a white speech bubble with the word 'PONG!' in blue is on the right. The hand is positioned in the center, holding the phone.

PING!

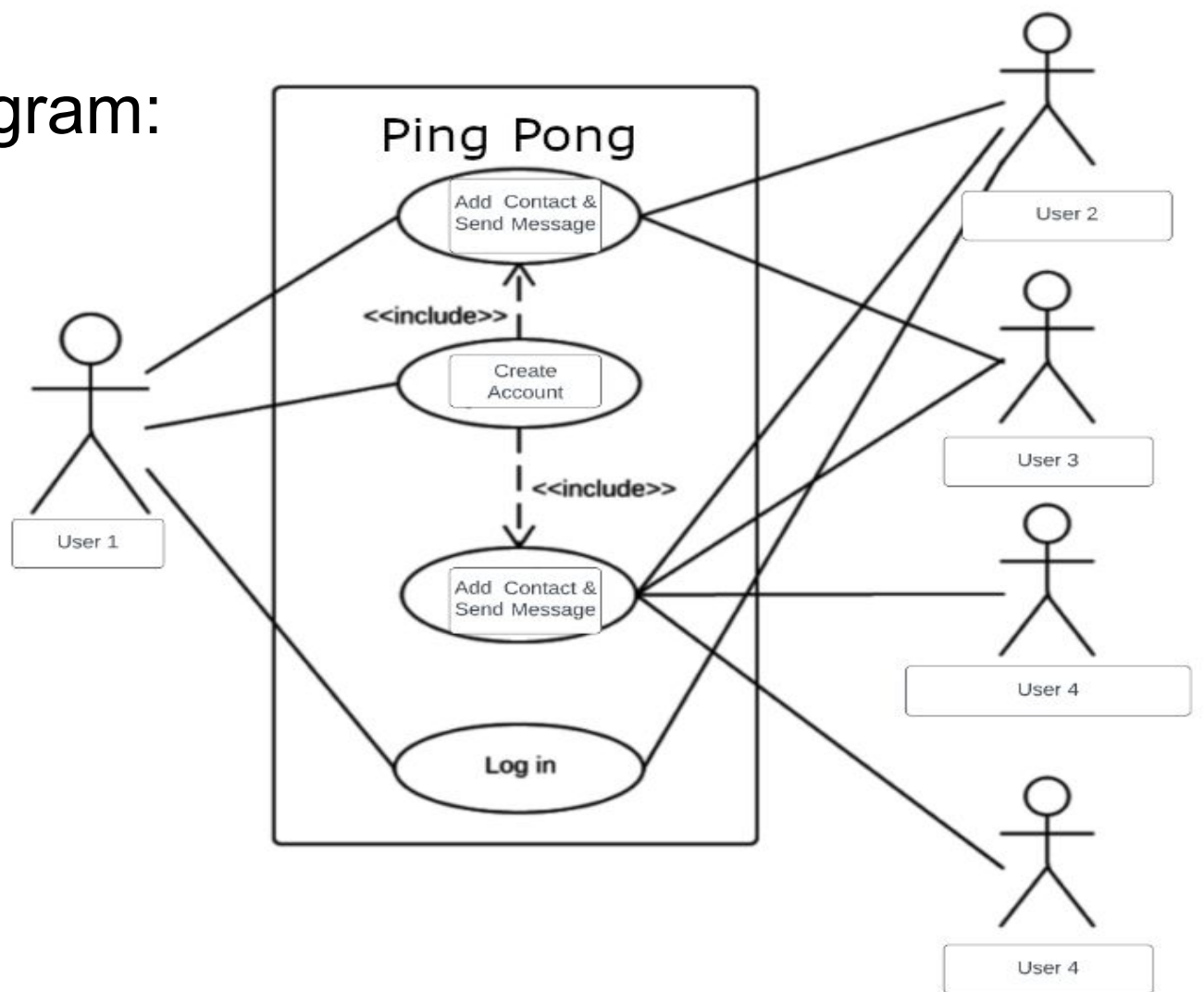
PONG!

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What's a Ping without a Pong?

- Ping-Pong is the simplest messaging app on the market, where users can easily communicate with each other.
- Users will create an account to add other users to their list of trusted contacts.
- Once connected, these contacts can easily send messages to one another on the platform.
- Users have the option of logging out, and upon logging back in will get their most recent unread messages from their contacts prioritized at the top of their list of conversations.

Use Case Diagram:

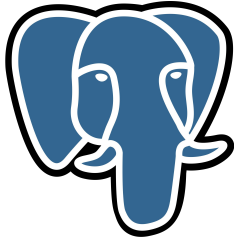


Tools Used



Project Tracker - Github Project Board, Used to track the progression of different components of the end product. ★★★★★

VCS repository - GitHub, Used as version control system to track the changes made to the code files. ★★★★★



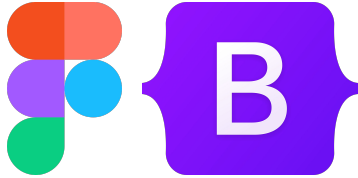
Database - PostgreSQL, Primary database. ★★★★★



IDE - VS Code, Primary Integrated Development Environment used for writing and implementing the code. ★★★★★

Tools Used cont.

HTML **CSS** **JavaScript**



UI Tools - HTML, CSS, JavaScript, EJS, Figma, and Bootstrap Tools used to make the web page and the styling behind the web page elements.



Application Server - NodeJS, JavaScript runtime server environment.



Testing Tools - Mocha and Chai, Unit testing tools.

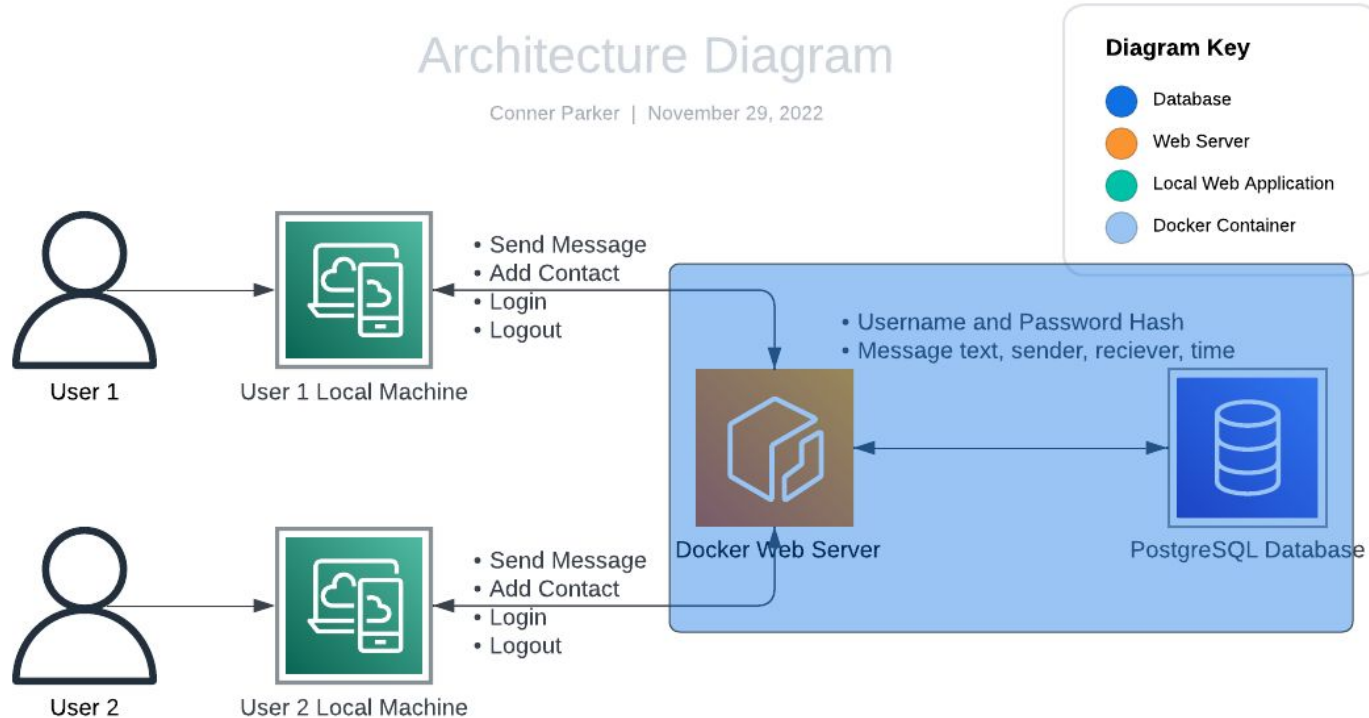


LocalHost CU CSCI Server

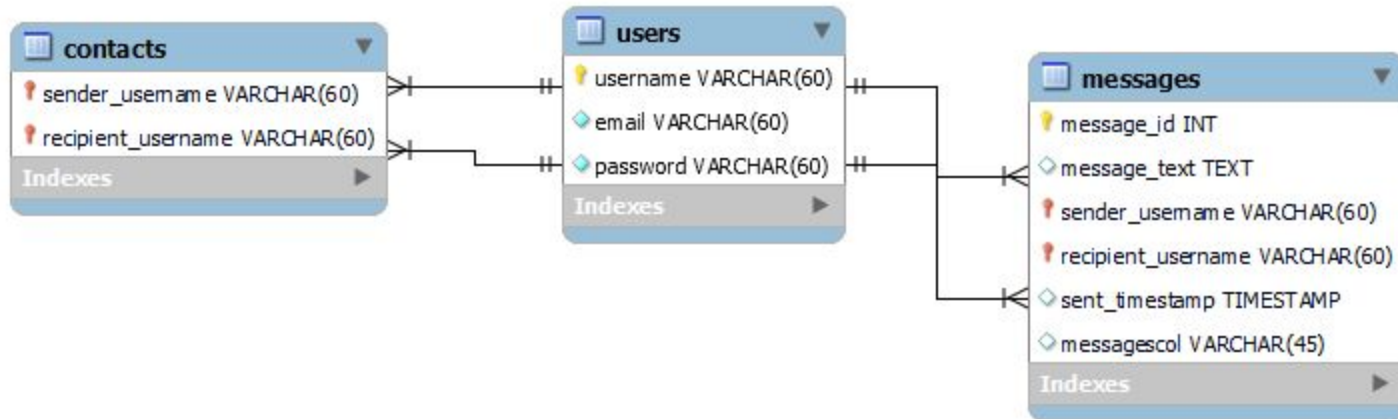
Architecture Diagram

Architecture Diagram

Conner Parker | November 29, 2022



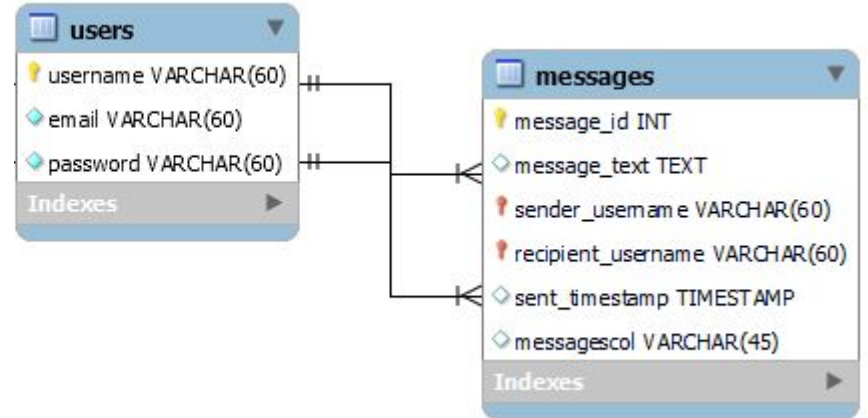
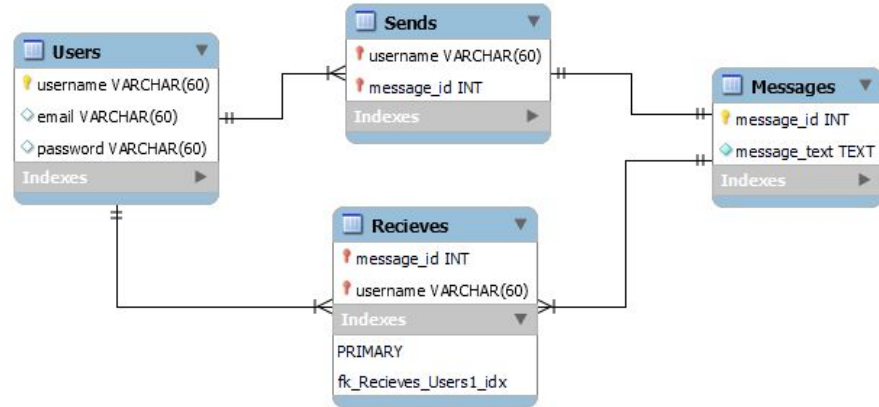
ER Diagram



Challenges

- We faced many challenges during the creation of our project. For example, we did not have the SQL experience necessary to create the messaging side of our application in the manner that we had initially planned. We had to work together and learn quick to come up with the necessary expertise for this project.
- Web hosting has also proved to be inconsistent and complicated for both the group and the instructors. Initially we were tasked with hosting on the university's server, but there were several crashes and glitches in their system. Our goal was to learn enough about other hosting platforms to hopefully host the app for others to enjoy beyond the end of this semester.

Challenges



Challenges

- Another challenge we faced was branch management, and keeping track of the feature structure. It was difficult to plan out how specific features would be implemented, such as whether or not contacts should be on a separate page, or on the home page. An additional example of this was how the application would handle messaging a new person, and if the message should be written in a basic text box on the home page, or to redirect to an empty messages page.

Demo