netwerk.

nathan scoglio samantha chang eduardo marin melissa wen

Meet the team.



Nathan ScoglioFrontend integration, full stack development



Frontend development, full stack integration

Samantha Chang



Eduardo Marin
Frontend development,
navigation



GUI design, databasing, and backend integration

Melissa Wen



what is netwerk?



Connection-based networking app with the simplicity of a dating app

The Design Process

- Took inspiration from Tinder / LinkedIn UI and functionality
- Documented all functionalities in detailed design
- Created a prototype implementing full GUI design

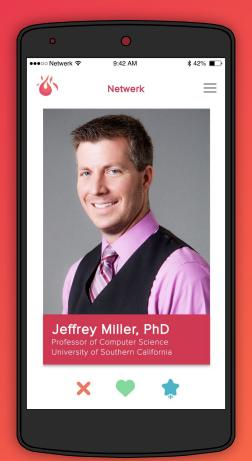


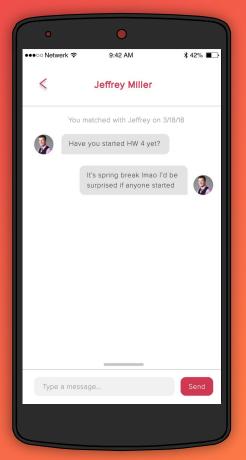












The Design Process

What worked:

- Creating the prototype
- Completing all documentation
- One person on UI mockup

What didn't:

 Underestimating time spent on each component



The Development Process

- 1. Assigned everyone to implement an entire page
- 2. 3 people on frontend, 1 person creating database
- 3. Moved to backend + integration after completing GUI





The Development Process

What worked:

- Everyone was responsive
- Watching video tutorials
- Getting together for integration and testing
- Pair programming

What didn't:

- Sendbird Messaging API
- Firebase cloud database
- Google App Engine backend
- Too many new functionalities
- Frontend/backend division
- Hardware and compatibility issues



Teamwork

- Regular meetings
 - At least 2 hours a week in person
 - CP meetings
- Flexibility in taking on different responsibilities
- Online communication over Slack
 - Met in person for integration







Skills and Tools

Languages:

- Java
- Javascript
- React Native
- SQL

Software:

- Eclipse
- Android Studio
- Sublime
- MySQL Workbench
- Figma
- Adobe Illustrator
- Tomcat server
- Github

APIs/Libraries:

- Fetch API
- Google Places API
- Native Base
- Gifted Chat
- SwipeCards
- React Navigation
- Gson
- ReactJS



Data Structures

- ArrayList users database
- Queue obtaining cards on home page
- Stack storing and fetching messages
- Set user relationships
- Hashmap screen names to corresponding pages

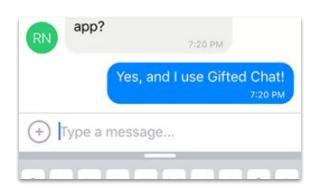




Multithreading

- Fetch API asynchronous calls to servlet
- GiftedChat messaging between users

{fetch API}





Netwerking

- Hosted servlet on Tomcat server
- Used Fetch API in React Native to call servlet
 - Parsed JSON HTTP servlet response in frontend
- JDBC connection between servlet and SQL database





Login Functionality



- Authenticated users log in and sign up
 - Directed to home page
 - Full access to home page, search and messaging features
- Guest users
 - Can swipe through card stack
 - Cannot search or message users, only swipe left
 - If swipe right, will alert user that they must create account before they can begin messaging



Professional Development

Topics we learned:

- React Native
- Gradle settings and configuration
- Running and deploying Android apps
- Project version control
- Design tools: Figma + Illustrator
- Package management: npm
- Pitching our product













Outside Courses

CSCI 109

Introduction to Computing

CSCI 104

Data Structures and Object Oriented Design **CSCI 103**

Introduction to Programming

CSCI 170

Discrete Methods in Computer Science

ISDS 265

Information Systems and Applications **DES 204**

Introduction to Adobe Illustrator



demo.

any questions?