

EBulletin



Micah E.R. Pinkley
Noah Franck

The Technology

The EBulletin Website

Challenges I Faced

- COVID-19
- Time Management
- Learning React
- JavaScript and NoSQL vs. PHP and SQL
- Coding Errors
- Communication Delays

COVID-19 and Time Management

- Forced to stay in my apartment
- Lost access to multiple resources
 - Learning
 - Work Space
 - Stress Relief
- Lack of a Schedule

Learning React and NoSQL v. PHP and SQL

- Everyone writes React in a different style
- No quick answers to bugs
- Very different from PHP and SQL

Coding Errors and Communication Delays

- One step forward, two steps back
- Again, very few quick answers to bugs
- Hard to schedule meeting times for help
- No face-to-face communications

The EBulletin Website

<https://senior-seminar-project-dev.web.app/>

What I Learned

- Finer points of JavaScript and CSS
- Basics of NoSQL
- Time Management
- In person communication is easier than video calls

The EBulletin App

Challenges Faced

- Flutter had a bug in which it was impossible to deploy on iOS for a few months
- Using 3rd party tools with little documentation
- Implementing way to sign-in
- Non-existing/limited testing pool

Flutter & iOS

- iOS 13 & MacOS catalina brought forth many issues for flutter developers
 - Until late February, people's code worked on emulators but not on physical devices
 - There were 3 different forums talking about how to fix it
 - But only one solution worked for apple
 - To pay them \$100 and become a licensed developer

3rd Party Tools

- In the mobile app we had a total of 10 third party tools
- Some were documented well
 - Cloud_firestore
 - Provider
- Some were not so much
 - Device_calendar
 - Timeago
 - Firebase_Core
- Firebase & Flutter versioning
 - One unnoticed update later nothing works

Google & Microsoft

- We would have preferred to use our school emails to sign in
 - This was possible on web
 - Due to limitation of Flutter we couldn't get this to work at this time
 - The developers have stated that they are working on adding it in the 'near future'
- We overcame this by implementing a username & password style authentication

Testing

- Unit tests are important for development
 - I set up an automated test suite early on to improve accuracy in code writing.
 - Found out that for what I was doing most functions couldn't be tested in flutter
- Small pool of devices & people to test on
 - I used my samsung device and iPhone 7 along with 2 emulators to try and test everything I could
 - Because of the amount of things to go over I could have missed something that I didn't think of
 - Limited number of organizations
- Notifications
 - I think it is set up correctly
 - But without real users in a natural environment near impossible to test.

App

- SHOULD I SHOW PHOTOS OR SHOW EMULATOR AT THIS POINT???
- YOUTUBE VIDEOS???
-

What I Learned

- Everyone learns differently
- The unexpected will occur
- Not to put all of my time in this project
- Close to 350 ways how to crash an app

Q&A