WORDRACE

First and foremost, I planned it out. I drew an activity diagram and mapped out all the activities and data flow. Then in the next step, I initialized both - the backend and the frontend. For the backend, I used Node and Express, for the database I used the NoSql database- MongoDB, and finally, for the frontend, I used ReactJS and Tailwind CSS for styling.

Furthermore, I first developed the backend and designed the user schema, and created all the necessary APIs. Then after connecting the backend to the database and testing the APIs I moved to the frontend. Here, initially, I built what one might call a 'skeleton' of an app. With no styling, just plain black and white borders and text. Once I am positive that this 'skeleton' application is working seamlessly, then I move towards styling, adding color schemes and animations. I usually use this approach because I believe that styling and beautification of an app takes quite a bit of time, one has to try a few designs and see what looks better. Thus, I rather prefer making a non-styled, not-so-appealing app that has complete functionality and then styling it at the end. The flow of the application is- homepage which has all the rules; then you can either login/signup or directly start the game; when you directly start the game, you play 1 round and once the game is over, you can login/signup to save the score or otherwise, you can play again without saving the score. I created the necessary states for the app and created 4 routes, one for the homepage that explains the rules, one for the game page where the user plays the game, one for login, and the last one for signup. For this routing, I used react-router. I faced a few speedbumps along the way as I used version6 of the router over my usual preference, that is version5, but I quickly adapted and overcame the obstacles.

Finally, after all the styling and frontend development, I deployed the application on a VPS that I had on DigitalOcean. The web app is deployed on an 'NGINX' web server running on Ubuntu OS while the backend of the app is running on PM2. Moreover, the MongoDB database is running on the VPS itself.

Source code at - https://github.com/scribblyVindex/wordrace