BioQuest Documentation



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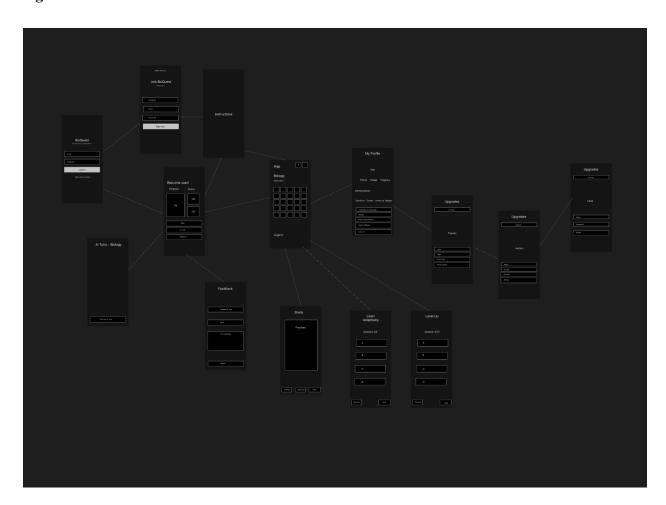
App Development:

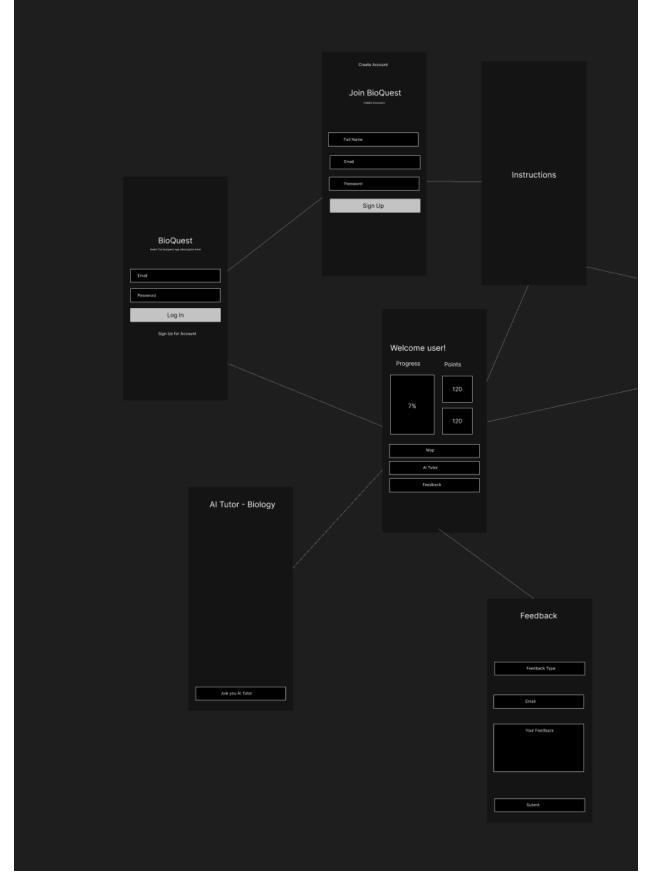
We developed this app in Visual Studio Code, an integrated design environment, using Flutter, a software development kit. The app can be run on all iPhones.

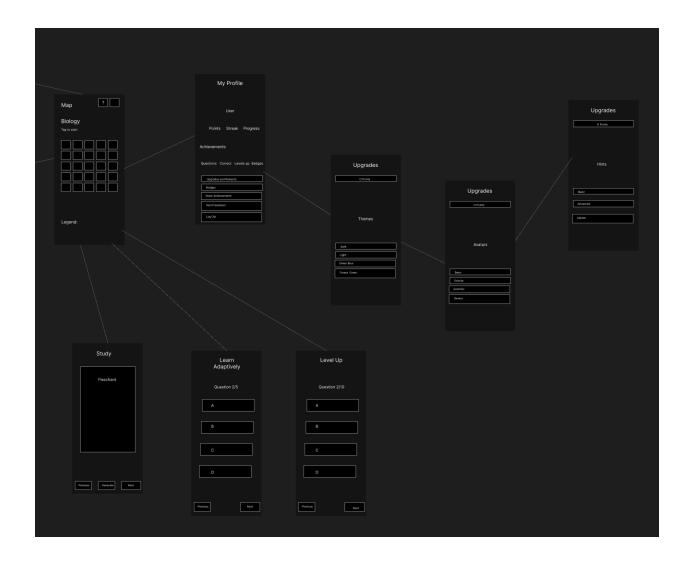
Planning Process:

Our planning process started in early January as we asked students in AP Biology what features they'd like and what content should be covered. Then we met on a weekly basis to brainstorm and develop. We used figma because it gave us a way to outline our UI professionally and streamline the UI development process.

Figma Outline:





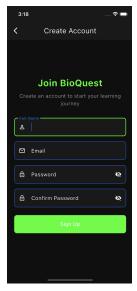


User Interface:

Sign in page: This is the first page the user sees after opening BioQuest. This screen showcases the color themes throughout the app and the slogan.



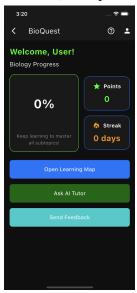
Create account page: This is the page where first-time users can create their account which will save all their account data. They are required to enter their name, email, and password to create an account.



Instructions page: After logging in for the first time the user sees the instructions which explains each of the 5 key features of the application: Log in, Map grid, AI tutor, rewards, and feedback



Home Screen: This is the home screen where the user can access the learning map, AI tutor, send feedback, user profile, and instructions screens.



User Profile Screen: The user can monitor their progress, questions answered, subtopics mastered, and level ups



Rewards: The user can buy avatars for their profile picture, themes, and hint upgrades with their points earned from answering questions



Learning Map screen: Presents the 25 biology subtopics that the user can master on three levels(rural, suburban urban)



Subtopic Options screen: The user can choose to study, learn adaptively, or level up the given subtopic



Adaptive learning: The user can take adaptive learning quizzes that contain questions and flashcards pertaining to the subtopic. This portion will adapt to the user's strengths and weaknesses as well as target their weaknesses.



Study: The user can study sets of 10 flashcards that contain important terms pertaining of the subtopic as well as generate more flashcards



Level up: The user can level up the subtopic from rural to suburban then suburban to urban by answering 9/10 or more questions right on the level up quiz.



Successful Level up: The user levels up from rural to suburban or from suburban to urban



Badge Screen: Once the user levels up they earn a badge which can be shared to friends through social media platforms



AI tutor: The user can send unlimited messages to the AI tutor to clear their doubts and get their questions answered



User Feedback: The user can report bugs and suggestions. They have to include their account information such as email address.

