The Ultimate Platform for Plankton Education

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I coded the first iOS app for plankton education to train aspiring students into novice marine-biologists. Since plankton is the base of our marine life food-chain and produces 50% of our atmospheric oxygen, it is important for the next generation of technology enabled students to consider plankton in their efforts towards sustainability. I partnered with an international marine-life nonprofit, to translate their curriculum for plankton education into a professional app. I began my independent project researching effective frameworks for building apps. The open source framework, Ionic, stood out as a professional multi-platform framework, which could publish code to iOS, Android, and Windows. I learned the five required languages, JS, Angular-Js, Html, Css, and Ionic, using online courses and references. One main feature of the app was a plankton memory match game, where I coded randomized plankton objects in an array to populate the student's game page with plankton cards to match. This helps students gain a visual memory of plankton allowing for quick recognition under a microscope. Students can then learn about the plankton they matched in a Browse Plankton and More Information section, or visit the What-Are-Plankton section. Finally, the app equips its users with an intuitive touch-screen dichotomous key, making plankton identification easily accessible to citizen scientists and placing the information of professional researchers in the hands of students. The app is already being used in classrooms around the world, providing the next generation of marine biologists with free resources to learn about plankton.

Awards Won: