Chemistry X10: Educational App with Problem Solver

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Today, smartphones crowd out personal computers, as they provide the same and even more features and functionalities as PCs, still being quite small, so we can take them anywhere. E-learning goes mobile, too. The aim of the project is to create the best chemistry educational app with problem solver that works on all mobile operating systems. Chemistry X10 can help high school students work through their homework problems, ace their tests, and quiz their understanding of basic chemistry concepts. It is enough to answer just a few questions regarding the conditions of a problem and Chemistry X10 will generate a complete solution with a detailed step by step explanation. We also made this functionality available in offline mode, so that even ancient phones could solve problems on the fly. Chemistry X10 can calculate the molar mass of any substance, convert units of measurement from a given form to a desired. The app even knows how to solve and balance equations. It allows students train and test their knowledge by performing various tests, balancing random equations for time, and studying theoretical material with integrated video experiments. The app has the mobile-oriented periodic table, thus enabling students to find all the necessary information about chemical elements. Chemistry X10 is a cross-platform app. It works on 8 mobile operating systems, including Android, iOS, Windows Phone, BlackBerry, Symbian, Bada, WebOS, and Firefox OS. We applied web-technologies and PhoneGap framework to achieve these results. Storage, adaptive design, animations, and transitions appeared due to HTML5 and CSS3 capabilities.

Awards Won: