

Our project 3 and 4 (a collection of 4 games where the user decides which to play) has two possible applications. One application is as a web game available via the internet and the other is as an app available via the app store. The potential market could be any person interested in playing a phone or tablet game or elementary or middle school aged kids interested in playing a game via a computer (a family computer or a school computer during downtime). The steps required to deploy our project 3 and 4 as a web game are to prepare the prototype (this would require a team of software engineers that can convert code from C++ to JavaScript/HTML/CSS because such a conversion would be necessary for a cleaner, more user-friendly, visually stimulating game as opposed to the terminal based game in C++), set up domain name system records (there would need to be considerations involving the name of the website, the url, the IP address, and other registration requirements for a website), perform product testing to see how users respond to the web game (this is necessary to ensure the web game is user friendly and visually appealing), perform live server testing to see how the web game fares in a real-world scenario, and then promotion of the web game via attendance/booths at conferences and conventions. The deployment for the app would be similar, but the prototype would need to be converted to a language more suitable than C++ for mobile app design (such as Flutter, Swift, or Kotlin).

The costs of deployment are calculated as follows. It took 5 hours to write each game initially so it would take about 20 hours to convert the code written for each game to another language and it would cost about \$25 dollars an hour to pay a software engineer for such a conversion, so it would cost about \$500 to prepare the prototype. The domain costs would be about \$10-\$20 (could be more depending on the exact name of the website). One product test would cost about \$120-\$300 (if we wanted to do more than one product test they would be

\$120-\$300 each). A booth for one day at a conference or convention would cost \$420 (each day and each conference would cost this much). It would cost \$99 to initially deploy the app in the app store (there is an annual fee of \$99 required to publish an app in the app store). Overall the cost to deploy the web browser with only one product test and only one booth at one conference or convention for one day would be \$1050-\$1240. Overall the cost to deploy an app with only one product test and only one booth at one conference for one day would be \$1149-\$1339. Realistically, the cost would be slightly higher because we would want to do more than one product test and attend more than one convention or conference to promote our product.