

Maintenance Plan

If we were to publish our program, we would need to add functionality to make it more commercially viable. Even though the game is fully functional for one person to play, it would be financially beneficial to add some features like betting with real money, playing against other players, and probably adding some more predatory betting options that favor the house more than the player. We'll ignore the cost of this because this would happen before release, so it's not really maintenance. After adding this functionality, we would publish the game as a website, and as a mobile app on the Apple Store and the Google Play Store. After adding all the real money-making functionality, there wouldn't be a need to add many more features, and because the size of the game is relatively small and we have already tested it extensively, there would probably not be many bugs that would need to be fixed after launch. So even though bug fixes would have to factor into our maintenance plan, the major parts of maintenance would be maintaining servers, updating the UI to avoid looking outdated, and updating code to work with new operating system updates that came out for any of the platforms the game was published on.

The costs for publishing the game (and keeping it published) are pretty simple. Publishing a game on the Apple Store requires that the publisher have an Apple Developer membership, which costs \$99 per year¹, so the total cost for one year to have the app on the App Store would be \$99. The cost for publishing an app to the Google Play Store is just a one-time \$25 fee². Since the multiplayer for mobile apps would be supported by the platform, there is no need to worry about servers. Finally, for the website, we would need to buy a domain, which would cost around \$10 per month depending on the domain name. Over the course of one year, this would add up to \$120. But in addition to just supporting the domain for the site, we would need to maintain servers.

For maintaining servers, a VPS server would probably be able to handle the amount of traffic we'd be expecting. Hosting a VPS server would cost around \$60 per month³. This would add up to \$720 total over the entire year.

Finally, we would need to pay programmers to actually maintain the code. Since the game is quite small and only took 5 people to fully develop, I think it would be reasonable to have only one or two programmers to stay and actually maintain the quality of the app and find and fix any bugs that would come up. Assuming again that these programmers are paid around \$35 per hour, and they would probably only need to work for around 5 hours a week, this would add up to \$9100 over 52 weeks. In addition to quality assurance, when large OS updates came out, the software would need to be updated to continue working on all these devices. For the platforms we would publish on, these large updates only come out around once a year, so this would essentially be a one time event for updating to match each OS. Even though developers are given multiple months to make these updates, the app itself only took about one month to create, so we can estimate that it will take a maximum of one month to convert to work on a new OS. Because this process can require a lot of testing, bug fixing, refactoring, and even UI updates if we want to keep our app looking fresh, we'll say that this process will take about 30 hours for each of the three operating systems we'd publish to. At \$35 per hour for programmers, this would be \$3150 total. Overall, the entire cost of maintaining the app for one year would end up being **\$13214**. Hopefully we'd make enough off of gambling addicts to profit.

Works Cited

1. <https://developer.apple.com/support/compare-memberships/>
2. <https://appinventiv.com/blog/how-to-submit-app-to-google-play-store/#:~:text=How%20Much%20Does%20it%20Cost,for%20android%20are%20cost%2Dfree.>
3. <https://www.websitebuilderexpert.com/web-hosting/cost-to-host-a-website/>