Executive Summary - QuestED Game Development

Overview
Parents of pediatric cancer patients at the Duke Children’s Hospital are given a handbook on the information that they need to know – what cancer is, how cancer can be treated, and what they can do to take care of their child while they undergo treatment. However, there are no such defined resources for understanding cancer available to the patients themselves. This is an issue because these children might have a hard time understanding such a complex disease and the series of treatments that they have to undergo, which can cause them to be scared and unwilling to accept treatment, or struggle to cope with their illness.

This project attempts to create a game that is part of a made-up world in which these children have different levels to pass in order to win the overall game. Each level helps teach a particular concept related to cancer, where they watch a video related to that concept, play a fun game, and then complete a short quiz. If made successfully, this game will help reinforce concepts taught in the video of the level and also provide entertainment so that users have fun and are distracted from their illness.

Target Users
The app is intended for children ages 6-14 who have leukemia. Parents may also use the app to learn how to better cope with the effects, but the app is mainly for children to learn about their disease, including types of treatment and side effects of the disease.

Value
This project is extremely important as it aims to educate the people who struggle with these diseases on what is actually happening with their bodies. As another benefit, this project will help these people have fun and distract them from some of their problems.

Functionality
The app will be a cartoon-style game in which the children play as a protagonist in a kingdom-based settings. By ascending 5 distinct levels or sections, they will learn about what leukemia is and what is being done to treat it. Each level, or section, is accompanied by an educational video. The concepts in the video are then reinforced in the game.
Technical Recommendation

Swift should be used to create this app, which is meant for iOS devices. This is because the existing code for the project is written in Swift. Continuing to develop in Swift will allow us save time by building on current code and still remain accessible to the majority of the pediatric patients. There are no expected server expenses, but there will be an expense for getting the app approved for the app store.