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## iOS Apple Pie Final Project Report

### Introduction

Apple Pie is an iOS application that allows users to play a guessing game where they try to guess a hidden word letter by letter before they run out of attempts. This guided project aims to develop this application from scratch while adhering to Apple's iOS development guidelines.

**Project Description and Requirements** the Apple Pie project requires the implementation of a simple but engaging game with an intuitive user interface. The game consists of a hidden word that the user must guess by entering letters one by one. Each incorrect guess results in the loss of one of the user's total attempts, and the game ends when the user runs out of attempts or successfully guesses the word. The user interface should display the number of attempts remaining, the letters guessed so far, and the correct and incorrect letters guessed.

### Designs

The user interface of the Apple Pie application consists of a screen with a picture of an apple pie, the hidden word, and a series of buttons that represent each letter of the alphabet. When the user presses a button, the application checks whether the letter is in the hidden word or not. If the letter is in the word, it displays the letter in the correct position(s) in the hidden word. If the letter is not in the word, it decreases the number of attempts remaining and displays the incorrect letter on the screen.

### Issues

The Apple Pie project may encounter several issues during development. One potential issue is designing a user interface that is both intuitive and engaging. Another issue is ensuring that the game logic works correctly, and that the application responds correctly to user inputs. A further

issue is ensuring that the application performs well on a range of devices and operating system versions.

### Discussions

The development of the Apple Pie application provides an opportunity to discuss the best practices and guidelines for iOS application development. These guidelines include designing an intuitive and engaging user interface, implementing game logic that is easy to understand and play, and ensuring that the application performs well on a range of devices and operating system versions.

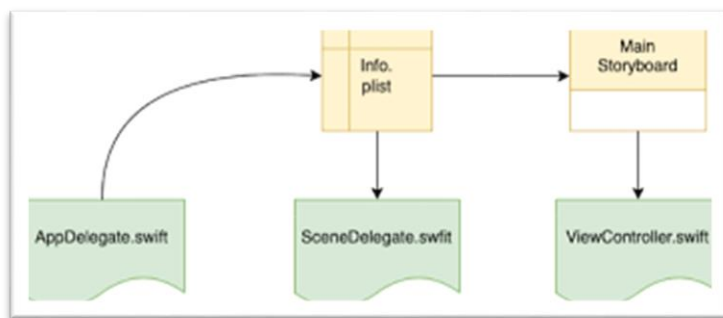
### Achievements

The development of the Apple Pie application provides an opportunity to gain several achievements. These achievements include learning how to design an intuitive and engaging user interface, implementing game logic that is easy to understand and play, and ensuring that the application performs well on a range of devices and operating system versions.

### Goals

The primary goal of the Apple Pie project is to develop a fully functional and engaging iOS application that adheres to Apple's iOS development guidelines. The project aims to achieve this by designing an intuitive and engaging user interface, implementing game logic that is easy to understand and play, and ensuring that the application performs well on a range of devices and operating system versions.

### UML Class Diagrams:



### Plans for Next Steps

The next steps in the development of the Apple Pie application include testing the application thoroughly to ensure that it works correctly and performs well on a range of devices and operating system versions. This testing will involve a range of techniques, including manual testing, automated testing, and performance testing. Additionally, the application may be enhanced with additional features, such as the ability to play against other users or to choose from a range of difficulty levels.

#### Tools:

For the Apple Pie project, we will be using Xcode, the official IDE (Integrated Development Environment) provided by Apple, to develop the iOS application "Apple Pie". To develop solid and efficient applications for Apple's environment, developers can use a wide range of resources and features included in Xcode. Swift, the primary programming language to create iOS apps, will also be used to develop the code for our application.

#### Technical Specifications

The Apple Pie application will be developed using Swift, Apple's programming language for iOS development. The application will be designed to work on a range of devices, including iPhones and iPads, and will support a range of operating system versions. The user interface will be designed using Apple's UI Kit framework, which provides a set of tools and resources for creating intuitive and engaging user interfaces. The game logic will be implemented using Swift's powerful and flexible programming constructs, such as functions and loops.

#### Conclusions

The development of the Apple Pie application provides an opportunity to learn and apply a range of skills and techniques in iOS application development. These skills include designing an intuitive and engaging user interface, implementing game logic that is easy to understand.

#### Bibliography:

Apple Inc. (2021). App Development with Swift. Apple Inc.

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