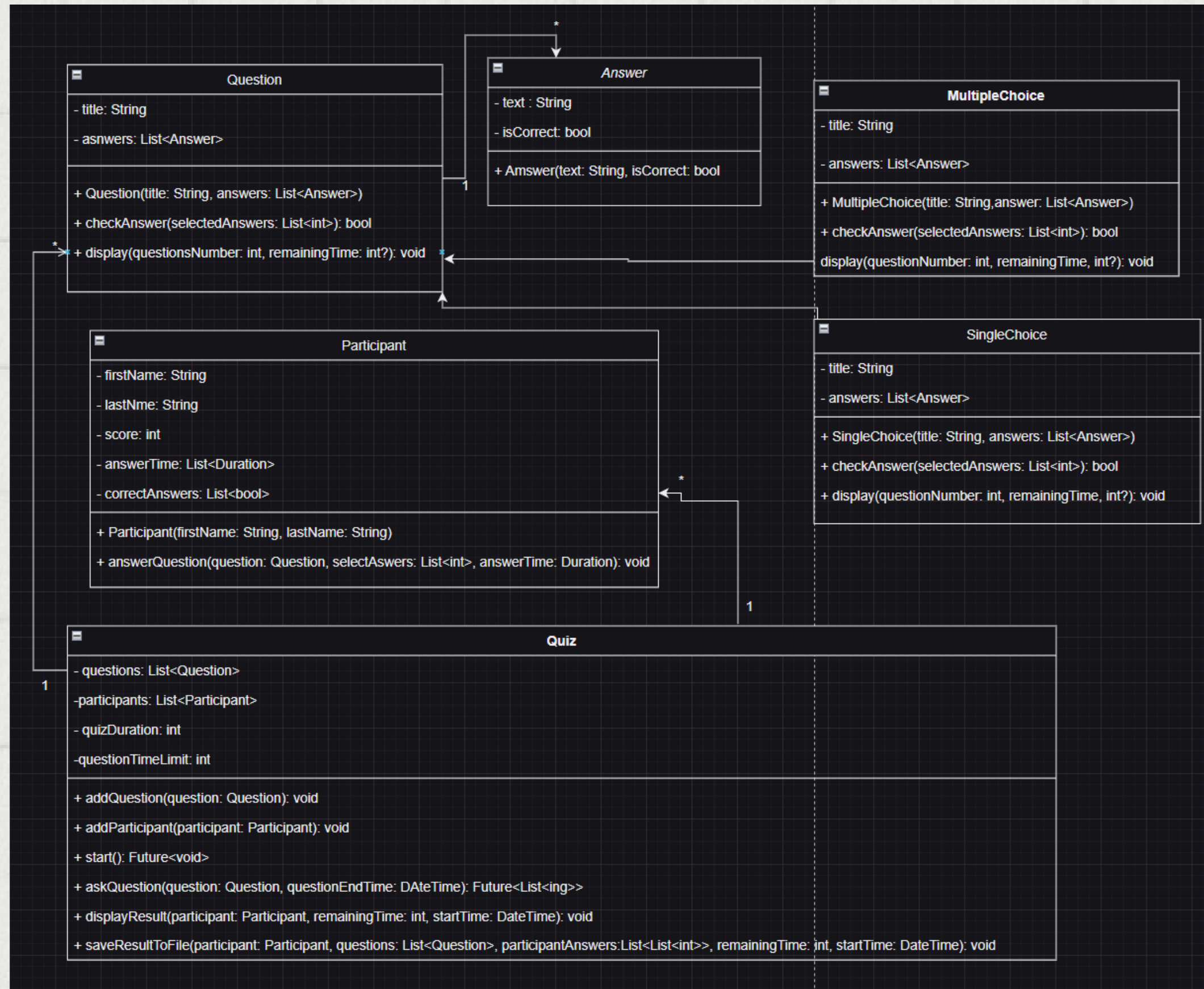# Micro Project Quiz

Introduction

This Dart quiz application aims to enhance user engagement, test participants' knowledge, and provide a structured platform for conducting interactive quizzes.

Class diagram

Question
- title: String
- asnwers: List<Answer>

+ Question(title: String, answers: List<Answer>)
+ checkAnswer(selectedAnswers: List<int>): bool
+ display(questionsNumber: int, remainingTime: int?): void

Answer
- text : String
- isCorrect: bool

+ Amswer(text: String, isCorrect: bool)

MultipleChoice
- title: String
- answers: List<Answer>

+ MultipleChoice(title: String,answer: List<Answer>)
+ checkAnswer(selectedAnswers: List<int>): bool
display(questionNumber: int, remainingTime, int?): void

Participant
- firstName: String
- lastNme: String
- score: int
- answerTime: List<Duration>
- correctAnswers: List<bool>

+ Participant(firstName: String, lastName: String)
+ answerQuestion(question: Question, selectAswers: List<int>, answerTime: Duration): void

SingleChoice
- title: String
- answers: List<Answer>

+ SingleChoice(title: String, answers: List<Answer>)
+ checkAnswer(selectedAnswers: List<int>): bool
+ display(questionNumber: int, remainingTime, int?): void

Quiz
- questions: List<Question>
-participants: List<Participant>
- quizDuration: int
-questionTimeLimit: int

+ addQuestion(question: Question): void
+ addParticipant(participant: Participant): void
+ start(): Future<void>
+ askQuestion(question: Question, questionEndTime: DAteTime): Future<List<ing>>
+ displayResult(participant: Participant, remainingTime: int, startTime: DateTime): void
+ saveResultToFile(participant: Participant, questions: List<Question>, participantAnswers:List<List<int>>, remainingTime: int, startTime: DateTime): void

Thank you!