QuizGame

Sjoer van der Ploeg
SGDE2
CSV1B
Hanzehogeschool Groningen
Student number: 279339
Juni 2015

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1.0 Introduction

This document will detail the design choices for the quiz game assessment.

I will elaborate on the following aspects:

Game design
Candidate classes

Which will be accompanied by:

Class diagrams
A flowchart
A screen wireframe

2.0 Game design

The quiz game I will design uses a database to store questions including the correct answer and two wrong options. These questions and answer options will be randomized before displaying them to the player. The database will also store the name of the player and his achieved score.

The player will have five seconds, starting when the question and its answer options are shown on screen. When the timer reaches zero the player can not answer the current question anymore and it will count as a fail.

The game will be based around a single screen which holds all the textfields, these will be reused and can be changed in size and text alignment. The input field will be added and removed when required.

3.0 Candidate classes

I made a noun/verb analysis as follows:

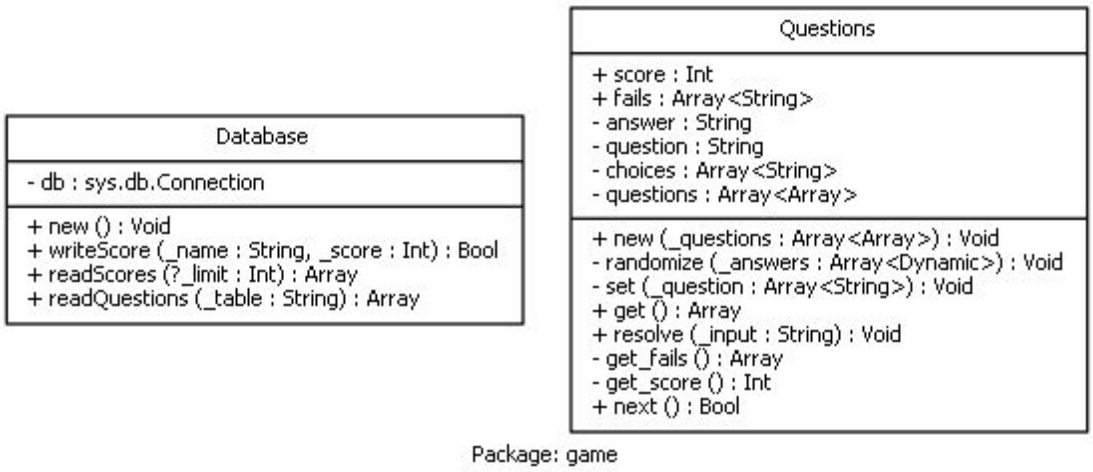
Noun	Verb
Database	Read
Questions	Write
Question	Get
Answers	Set
Answer	Resolve
Scores	Input
Score	Output
Time	Timer

From here I got a rough overview of what was required for the final game:

GameController	Will manage the input and output to and from the other classes
Display	Will hold a total of 13 textfields to show questions, answer options, time remaining and high scores to the player
Quiz	The game logic itself
Input	Field to get the players name
Database	Will contain the questions, answer options and scores
Questions	Will hold the array of questions, track the current question + answer options and resolve the user given input

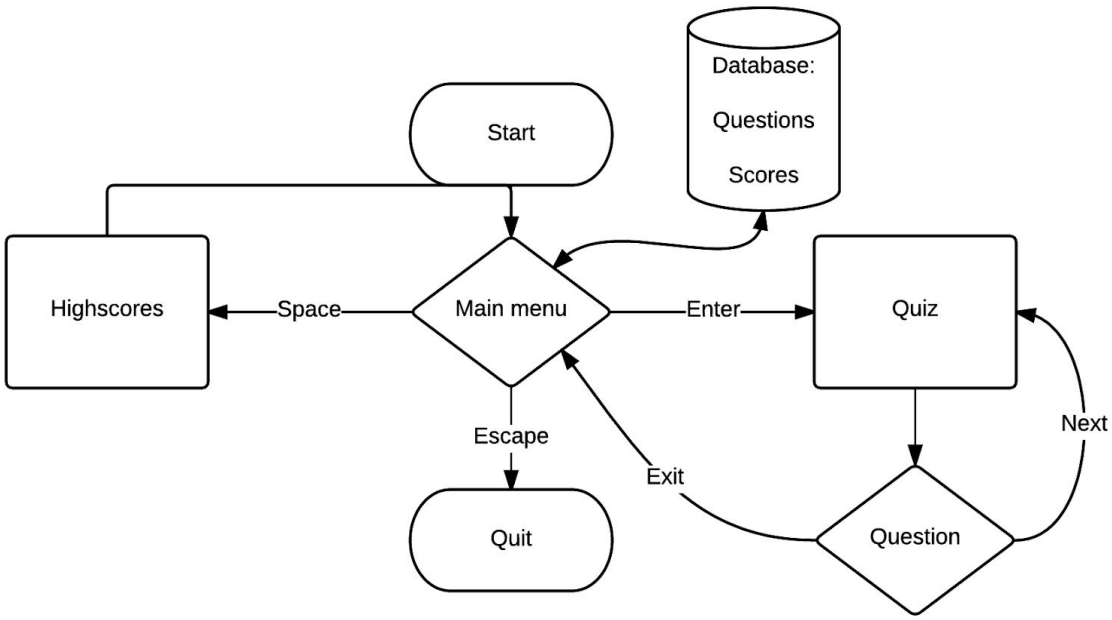
4.0 Class diagram

After some further thinking and fitting all bits together these two UML class diagrams detail the final quiz game.

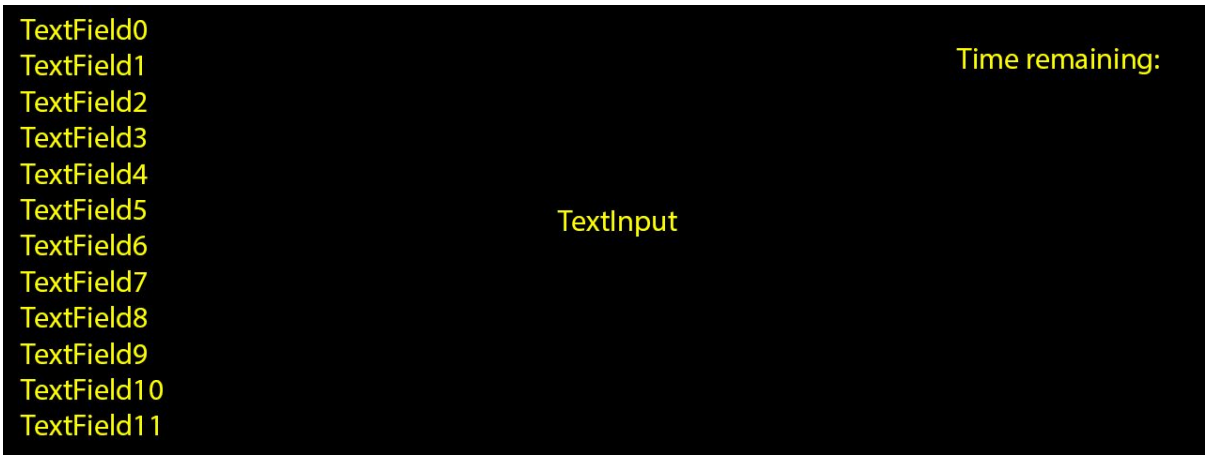


4.1 Flowchart

The following flowchart roughly describes the flow of the game:



5.0 Screen wireframe



This is the screen layout that will be used for the game, it will be used for everything that happens on screen.