# Component overview, Vue trivia

## Diagram of components

A screenshot of a cell phone

Description automatically generated

## Views

### GameMenu

This component displays the main menu of the application. On creation, the categories are fetched opentdb and stored in “availableCategories”. Difficulty and category are selected through dropdown-menus and stored in “selectedDifficulty” and “selectedCategory” and in sessionStorage. When they are both selected a start-game-button is enabled with the “enableStartGameButton” method. When clicked, the “startGame” method routes to the GamePlay component and passing difficulty and category as params.

### GamePlay

This component displays the quiz questions and keeps track of selected answers. On creation, all the questions are fetched using axios in the “fetchQuestions” method. This fetches the questions and creates question objects of the “Question” class. These objects are then stored in “questions”. On each question an object is popped from the “questions” array and passed to “currentQuestion”. This question is passed to the QuizQuestion component. When an answer is selected the “onUpdateGame” method is called. This method pops from “questions”, pushes “currentQuestion” to “answeredQuestions” and runs the “endGame” method if there are no more questions. The “endGame” method routes to the GameOver component with the “answeredQuestions” passed to params.

### GameOver

Before mounting this component retrieves the questions sent from GamePlay, calculates the result score and retrieves the difficulty and category from sessionStorage. The questions passed are stored in “questions” and this array is displayed with the question text, the correct answer and the selected answer from the player. A button runs the “toMainMenu” method, when clicked. This routes to the GameMenu component.

## Components

### QuizQuestion

This component takes a Question object and use it to display question text and answer texts. It handles the logic of selecting answers and communicating to the player if the answer is correct or not. When a question is selected the stored question is updated and passed back to the GamePlay component.

### QuizResults

This is a dumb component that simply displays the question array and the result passed from the GameOver component.

## Question Helper class

This class takes a question-object from opentdb in the constructor. The class contains a lot of helper functionality:

* It decodes the strings in the question object when constructing.
* It creates an “options” array that has the correct answer mixed in with the wrong answers in a random position.
* It also checks the selected answer by comparing “selectedAnswer” with “correctAnswer”. This is done in a setter function for selectedAnswer. This makes the logic in the components simpler since the object is just updated and passed around.