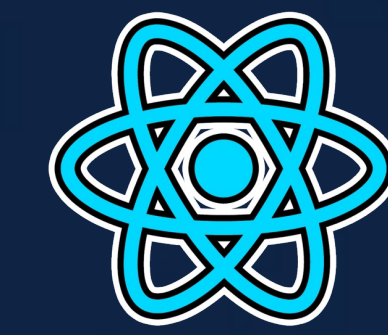




**Knight Foundation
School of Computing
and Information Sciences**

Knight Foundation School of Computing and Information Sciences

Spring 2024 Senior Design Project



DemoEd

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CURRENT SYSTEM

DemoEd is a web application built using React and styled-components. It features a complete user authentication system, course management, and assignment activities integration, all facilitated through a well-structured routing system with React Router. Users can browse courses, view detailed course information, add assignments, and manage course-related assignments. This feature is designed to support both instructors and students, providing them with the necessary tools to manage and participate in course activities effectively.

PROBLEM

Although the system offers great course management and assignment handling, it does not include a specific tool for creating, administering, and grading quizzes online, which is a critical component for lots of educational environments for both formatives and summative purposes. This feature aims to fill that gap by allowing user (instructors & student) to design, customize, and deploy multiple choice assessments directly within the platform. By integrating this tool, the system will provide a more comprehensive, versatile educational experience, catering to the importance of student learning analytics.

REQUIREMENTS

The system must allow users to:

- Create, edit, and preview multiple-choice quizzes.
- Include single or multiple correct answers.
- Navigate through questions during quiz-taking.
 - View scores upon quiz completion.
- Ensure ease of use with a clean and intuitive user interface.

Create Multiple Choice Assessment

Quiz #1

Frogs are...?

Amphibians

☒ Correct Answer(s)

Long-bodied

☐ Correct Answer(s)

Tailless

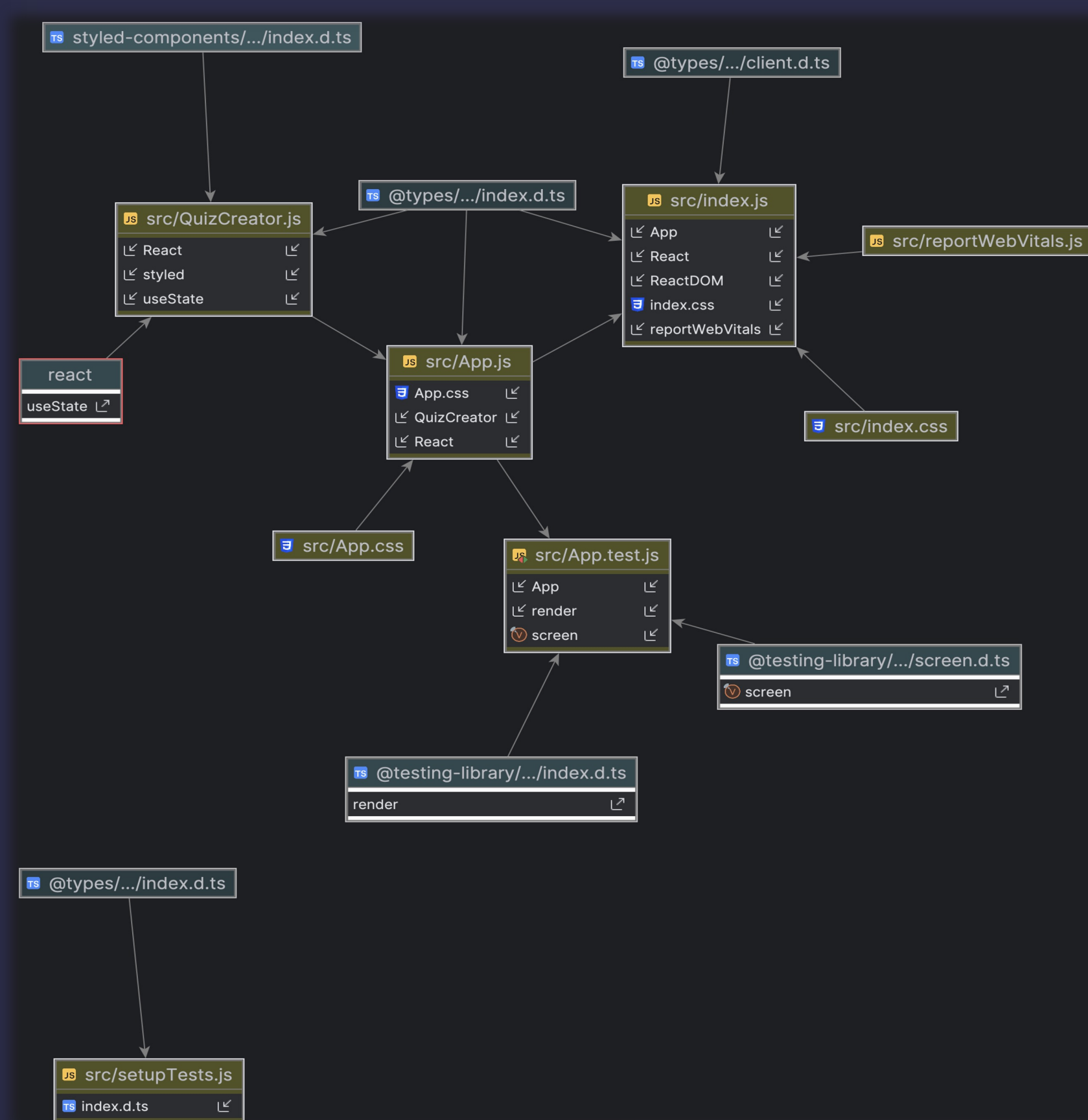
☒ Correct Answer(s)

Fish

☐ Correct Answer(s)

[+ ADD QUESTION](#) [Preview](#)

CLASS DESIGN



This class manages user interactions such as adding questions, selecting correct answers, and navigating through the quiz creation and preview stages, making the process of assembling a multiple-choice assessment straightforward and interactive.

SYSTEM DESIGN

The system is designed as a web-based application utilizing React.js for the frontend. It was built using a modular architecture approach, allowing for different functionalities to be developed and maintained independently. Each module corresponds to a specific aspect of the quiz creation process, such as question input, options management, answer validation, and results processing. The UI is designed with simplicity and user-friendliness in mind. It employs a clean layout with clear navigation pathways.

Preview: Quiz #1

"Strawberries can be classified as...?"

☐ Seedless ☒ Red

☒ Fruits ☒ Low-fat

[Previous](#) [Begin Quiz](#) [Next](#)

Quiz Completed!

Your score is 3 out of 3.

[Create a New Quiz](#)

SUMMARY

The "Create Multiple Choice Assessment" program provides an efficient and user-centric approach to constructing assessments. With a focus on usability and functionality, it enhances the educational toolkit for instructors and contributes to streamlined learning experiences.

IMPLEMENTATION

- The program allows users to input questions, answers, and mark the correct responses within a user-friendly interface.
- Dynamic UI components allow real-time addition and deletion of questions and toggling of correct answers for each question.
- Preview functionality lets creators view and interact with assessments, ensuring clarity and functionality before finalizing.
- During quiz-taking, users progress question by question, with their selections recorded and a final score presented upon completion, mirroring a real-world assessment environment.

VERIFICATION

By constructing and executing test quizzes within the feature, ensuring that the system accurately displays questions, answer choices, and results based on user input/responses. Successful tests confirm the feature's reliability and functional correctness.

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Dr. Sat Gavassa, Alisa, Shanice, Franklin, and David I thank them for their assistance and mentorship that I received throughout the senior design project.