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# **SIMPLE SURVEY APPLICATION**

This project aims to develop a simple survey application using Java. The application allows users to create surveys with various types of questions and gather responses from participants. The project incorporates the concepts of polymorphism and interface to provide flexibility in adding different question types.

## **FEATURES:**

- **Survey Creation:** Users can create surveys by providing a title and adding questions of different types.
- **Question Types:** The application supports multiple choice questions, where participants can choose one option from a list of choices.
- **Polymorphism:** The project demonstrates polymorphism by utilizing the Question interface, allowing different question types to be treated uniformly.
- **Interface Implementation:** The Question interface defines common methods that all question types must implement.
- **Display Survey:** The application displays the created survey, presenting each question to the user.
- **Gather Responses:** Participants can provide their responses to the survey questions.
- **Summary of Responses:** The application generates a summary of the survey responses, displaying the questions, options, and participant responses.
- **By implementing polymorphism and using an interface,** the project offers flexibility for future expansion. Additional question types can be easily added by implementing the Question interface in new classes.

Overall, this simple survey application provides a basic framework for creating surveys and gathering responses. It can be extended and enhanced to include more advanced features and question types based on the project's requirements.

## **OUR PROBLEM:**

Collecting feedback and conducting surveys is an essential aspect of many businesses and organizations. However, developing a flexible and easy-to-use survey application can be challenging. It requires handling different types of questions, managing responses, and presenting survey data in a meaningful

way. Additionally, accommodating future changes and additions to the survey format can be complex without proper design considerations.

## **OUR SOLUTION:**

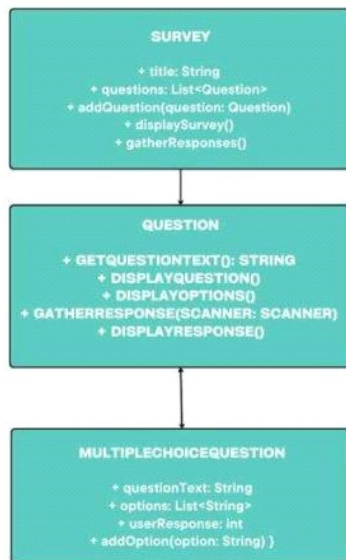
To address these challenges, we propose developing a simple survey application using Java. The application will leverage polymorphism and interface implementation to provide flexibility and extensibility in adding different question types. By designing the application with these concepts in mind, it will be easier to accommodate new question types and maintain the codebase in the future.

## **RUNNING THE PROGRAM:**

- Ensure you have Java Development Kit (JDK) installed on your machine.
- Set up a Java development environment, such as an Integrated Development Environment (IDE) or a text editor.
- Create a new Java project and set up the necessary project structure.
- Copy and paste the provided code into your Java project files.
- Compile the Java files to generate the bytecode.
- Run the program by executing the main method in the Survey class.
- The application will display the created survey, gather responses, and provide a summary of the responses.

## **PROJECT CLASS DIAGRAM:**

Examine the diagram below for a further understanding of the classes involved in this project (and their functionality):



### ADDITIONAL DOCUMENTATION:

Should you be interested in diving further into this project, you can access the GitHub repository for this project here: <https://github.com/prigorian/FinalProjectOopPrigo>