

## Assignment: Dicee App with Auto Layout

### Objective:

In this project, you will create a simple iOS app using Auto Layout tools in the storyboard. The app will have two dice images and a button. When the button is pressed, both dice will change randomly, simulating the rolling of dice.

### Requirements:

- The project must be done using **Auto Layout** in the storyboard.
- You will place **two UIImageView** elements to represent the dice.
- Add a **UIButton** element below the dice for the user to roll the dice.
- When the button is pressed, the dice images should change randomly.

### Steps:

1. **Project Setup:**
  - a. Create a new iOS project in Xcode using the **Single View App** template.
  - b. Name the project “Dicee”.
2. **Design the Interface:**
  - a. Drag two **UIImageView** objects into your storyboard.
  - b. Set the two dice images (you can use pre-designed dice images or use placeholders for now).
  - c. Add a **UIButton** below the dice images. Set the button title to “Roll Dice”.
3. **Auto Layout:**
  - a. Use **Auto Layout** to ensure that the dice and button are properly aligned and responsive to different screen sizes.
  - b. Both dice should be horizontally centered on the screen, with equal spacing between them.
  - c. The button should be placed below the dice and centered horizontally.
4. **Random Dice Roll Logic:**
  - a. In your **ViewController.swift**, create an action method for the button using the **@IBAction** directive.
  - b. Add two arrays containing the names of the dice images (e.g., dice1.png, dice2.png, etc.).
  - c. When the button is pressed, randomly select an image for each die from the array and update the **UIImageView** objects.
5. **Additional Requirements:**
  - a. Use at least **6 different dice images** for each die.
  - b. Ensure that the random images do not match between the two dice each time you press the button.
  - c. Provide a brief description of how you applied Auto Layout to ensure responsiveness on different screen sizes.

### Bonus Challenge:

Implement a **shake gesture** to roll the dice without pressing the button. You can detect the shake using `motionEnded` in Swift.

**Submission:**

- Submit your project in git repository of your Xcode project folder.
- Ensure your app runs without errors in the simulator.

**Grading Criteria:**

- Proper use of **Auto Layout** (20%)
- Correct implementation of **random dice images** (40%)
- Clear and functional **UI layout** (20%)
- Code structure, clarity, and comments (10%)
- Bonus Challenge (10%)