**MINI PROJECT II**

**CS209-CS210  
 Computer architecture**

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**ABOUT**

An arcade style game in which the user controls the bird (character), which flies steadily to the right. Bird must be maneuver through pairs of pipes with gaps that are similarly spaced and positioned at random heights. Birds have the ability to hop, which will result in a certain rise in height from their current position as they pass through pipes.

**POWER AND GRAVITY**

In an effort to make the game more realistic, gravity has been added. As a bird's height increases, gravity begins to affect it, causing it to be drawn down towards the ground again with varying velocities. In order to give the user a more enjoyable experience, we set the gravity such that they have enough time to make the object hop again or any other necessary action.

**LEVELS**

Every time a player completes a challenge, the game's level advances. When a player reaches the edge of the screen, the difficulty rises and the graphics quickly refresh. The number of pipes in each level is directly related to how difficult it is, therefore in the first level, there will be two pipes, followed by three, four, and so on. Since the width of the screen display remains constant, the distance between consecutive pipes gets smaller as difficulty increases. Additionally, the height of the pipes is randomly generated, adding to the user's amusement because the first pipe's gap might be at a certain y coordinate and the next pipe's gap might be far away, requiring the user to hop farther or reduce the height of the pipe in response.

**END GAME**

Game Ends when user hits any pole, and interface is changed showing “GAME OVER” with some 3D type animation in background.

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