**Amrita School of Engineering, Bangalore**

**Computer Graphics and Visualisation Lab**

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**Year and Semester.**: 4th Year, VII Semester

**Title**: Catch the Fish – Game

**Languages used to develop**: C++

**Technology used**: OpenGL

**Scope of Project:** This project is intended for entertainment purpose. The game is made using OpenGL technology and C++ programming language. The program is built using object oriented approach. This approach allows not only to control each character in the scene but also gives flexibility to modify the features of the game when needed. It also increases the efficiency of the program due to its ordered structuring. The objects in the game are reusable components so it can be used multiple times to render different characters while using the same class. Each object in the scene rendered have their own physics. For example, the fish uses a projectile motion to jump out of the water and the bird has a glide motion to swoop down to eat the fish and go back. The IO devices used are mouse for a click function and Monitor as display device.

**Abstract/Synopsis**: Catch the fish is an interactive game featuring 2D retro style graphics. The objective is to direct a flying bird to catch the jumping fish and eat them. If the player manages to make the bird eat the fish, he earns a score of +1. However, if the bird misses the fish the score decreases by -2 which is significant of the bird going hungry by not able to eat the fish pointed to by the player and thereafter starving. The game ends if the points go negative and the maximum score earned in the game is displayed.