## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM-570014, KARNATAKA



A Mini Project On

#### "Ocean bed Scene 3D"

A Mini Project submitted in partial fulfillment of the requirement for the COMPUTER GRAPHICS AND VISUAL LABORATORY

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#### **Department of Computer Science and Engineering**

#### **CERTIFICATE**

This is to certify that the report on the mini project work entitled "Ocean bed Scene 3D" has been submitted in partial fulfillment for the VI semester Computer Graphics and Visualization Laboratory Curriculum and is a result of work carried out by ABHISHEK S (4VM12CS002), the student of VI semester Computer Science and Engineering as prescribed by Visvesvaraya Technological University, Belgaum during the academic year 2014-2015.

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#### **ACKNOWLEDGEMENT**

Any achievement does not depend solely on the individual efforts but on the guidance, encouragement and co-operation of intellectuals, elders and friends. A number of personalities, in their own capacities have helped us in carrying out this project work. We would like to take this opportunity to thank them all.

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#### **ABSTRACT**

Computer Graphics is an interactive method of pictorial synthesis of real or imaginary objects from their computer based models. Another closely related term is the "image processing" which is the analysis of scene or the reconstruction of the models of 2d or 3d objects from their pictures. These are used today in everyday life, be it a replay in a cricket match, advanced graphics in movies or the daily weather report display on TV.

Graphics based user interfaces have made productive users of neophytes, and the desk without its graphics computer is increasingly rare. At the same time that interactive graphics has become common in user interfaces and visualization of data and objects, the rendering of 3D objects has become dramatically more realistic, as evidence by the ubiquitous computer – generated commercials and movie special effects.

Modelling and rendering paradigm is used in the Mini Project, "OCEAN BED SCENE 3D" that has been created using the OpenGL interface along with the GLUT (OpenGL Library Toolkit). This project demonstrates the structure of the Taj.

This project demonstrates Designing and Implementation of 2D animation, creation of geometric objects using OpenGL functions, coloring of geometric objects using OpenGL functions, translating a particular object from one point to another point, sighting and shading has been used for the visible effect, user interface using mouse and keyboard as the Input devices and finally creating and attaching menus.

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