

CUBE Game

This project was an introduction to game programming for me. I have searched for a game engine for this game. Because I need first a way to introduce in creating games. I was known with familiar game engine in that time like Unreal, CryEngine and Scemitiar. I choose OGRE graphics engine that has many parties that can changed it to a game engine. Because no only it has great design also it is open-source and it can be changed in a manner that we want. During this project, I understand that a game cannot be created without previous designing. So, I start to learn UML and how to design using UML. Enterprise Architect is used to design. Visual Studio is used to implementation. Finally code has been reversed by Rational Rose and some modification has been done to class diagram to create the diagram that is attached to this project.

After finalizing this phase of game creation, a script is implemented in MaxScript that causes users be able to create their own games with their own rules.

This project mainly focuses on:

Using a good game engine to design and create game to be aware of how to this work is done.

- Working with different libraries and wrappers to implement different parts of game like GUI.
- Using software engineering patterns to create a well-designed game (Patterns like Singleton, Adapter, Composite is used in this project).

Libraries that is used in this project:

- OGRE Graphics Engine
- OpenAL
- CEGUI

Packages used in this project:

- Visual Studio
- Enterprise Architect
- 3D Studio Max
- Photoshop

Files:

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|--------------------------|--|
| Cube_Game_Executable.rar | Contains an executable Version of project. Requirements are: <ul style="list-style-type: none">▪ OpenAL▪ Visual C++ Redist |
| ClassDiagram.PDF | Contains Class Diagram |

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| ClassDiagram.mdl | This file needs Rational Rose to be opened. |
| Cube_Game_Solution.rar | Contains codes of the game. Requirements are: <ul style="list-style-type: none">▪ OGRE graphics engine 1.6(It contains additional libraries beside which be able us to call it Game Engine)▪ OpenAL SDK▪ Visual Studio 2008 SP1 |
| Oalinst.rar | OpenAL Installer |