

# Project ADF

## Group 11

Klas Flodin

Mikael Nilsson

Anders Ljungqvist

Erik Nikkola

Kaj Sandberg

# Project Overview Document

## 1. Target demographic

The gaming community is an aging one. According to MDTTS( Sveriges branschförening för multimedia Dator- & TV-spel ) the average age is about 29 years and rising. A lot of these players remember and still talk of the old games that have made a big impact on their lives. This is evident in the rising amount of remade games and forums about them. For example the Retrogaming Roundtable forum has over a million posts and around 20000 users.

We want to create a Dune 2 clone that features some more advanced functions that has arisen in gaming technology since the release of the original game. Our target demographic is nostalgic players who have played Dune 2 and felt it wasn't all it could have been.

## 2. The main uses of the system.

Project ADF is an attempt to create a clone of the old classic Real Time Strategy game Dune 2 but with a touch of the more modern features in the RTS genre. The project will try to keep the same simple graphical concept but add another depth to the original game by adding features such as more flexible tech tree and a limited possibility to create custom units.

### User scenario 1

Donny had run into his old buddy Malcolm which he hadn't met for several years. They used to hang out back in the early nineties, a time when they called themselves D.Burns and Mr.Madcow on carefully selected IRC-channels. So now he invited Malcolm to a night of remembrance and nostalgia. They started by opening a couple of beers and when they were past the first moments of catching up they turned on two computers and to play a multiplayer game. They both agree that when they get joyful chills when they think of Dune 2 but they also agree that the magic is partly gone now that they are older. But Donny kept smiling because he had some news for Malcolm. ADF - the new Dune 2 clone that had been modified with more functionality and a wider range of possibilities and with that extra spice it made the magic better than ever. They both start up the game on each computer, Donny clicks on host network game on the menu. He then chooses a map on which to play and then the speed of the game, they are both rusty so he selects slow game pace. Finally he presses start game and the game goes into "wait for other players"-mode. Malcolm chooses join multiplayer game in the menu and selects the only host on the network and then hits join game. Donny is so happy that he doesn't realize the amount of beer he drinks and after a while, when he starts to lose his edge, Malcolm wins. Mr.Madcow is back!

### User scenario 2

Larry Sits back down by his computer after a long lunch break. He has a lot of work to do but he doesn't feel up to it at all really. He needs something to get him back in good mood and it comes to him instantly. His new favorite game, not the old game Dune 2 that he played fifteen years ago or so, but a new refreshed clone. One of the best things about it is that it is so easy to get up and running, no need for DosBox or any other emulator, just start the game and play. He starts up the game and it only takes a second even though his office computer has been with him for quite some years. He then selects load game in the menu to load the game he had saved quickly earlier this morning when his boss had come running into his office and instantly he is back in a world of his own, the world that brought him back

in time before life got too serious. Resuming the game, he had forgot that he was in the middle of a battle and it doesn't take many seconds before he dies so he reloads the saved game. It might be called cheating, but what the heck. He realizes this time that he can select multiple units by drawing a box around them and thereby more quickly move his troops, this being a feature that Dune 2 never had. So suddenly he wins the battle in a few strikes and he's jumping up and down and shouting in euphoria in his office chair, when he remembers where he is and, now in a much better mood, returns to this afternoons work.

### 3. The context/environment

#### In which context/environment is the system to be used?

The game works on Windows XP and on Linux in an X-environment. The environment requires support for OpenGL and OpenAL 1.0. Controls required will be keyboard and mouse. The game supports only one player per computer although any player that has network access can host and play a multiplayer game on his computer.

### 4. The scope of the system.

Topic	In	Out
AI	X	
Multiplayer	X	
Custom units	X	
Save/Load	x	
Pause single player	x	
Pause multi player	x	x
3d graphics		x
EAX		x
Real time game	x	
Game speed	x	
Space environment		x
Sand tornado	x	
Particle engine		x
Terrain elevation		x
Tech tree	x	
Story mode		x
Script based events	x	
Recycle dead units	x	

## 5. Design factors

**What are the main factors that needs to be taken into account when designing and building the system?**

- The learning curve of the game. The game interface must be intuitive and easy to use.
- The game must provide a continuing motivation to play
- It must appear to be challenging but still winnable to the experienced player as well as the beginner.
- The game needs to be balanced. Both in consideration to the enemy as well as unit balance.
- The AI must be challenging but not too much so.
- Game pace. Players are smart but the computer is much faster at performing simple tasks
- Hardware performance must be considered. The game must run smoothly.
- The markets needs and wants must be considered.

## 6. Technologies and Risks

**What technologies are to be used in the project and what are the risks of using them?**

- We will use OpenGL to present graphics. OpenGL is a widely used and implemented specification and should therefore present very little risk. However since we are relatively inexperienced with OpenGL, a risk still exists.
- We will be implementing sound in the game. However none of the project members is very experienced in this area so this might present a risk.
- The CASE-tools should present very little risk. However inter platform difficulties and similar issues could present a problem.