Itzamná's Heritage

Mayan Red Light

Interim Report

Thomas Britschgi Silvan Tschopp Marcel Weber

April 19, 2010 Game Programming Laboratory, CGL, ETH Zurich

Table of Contents

| 1 | Dev | elopment Status | . 3 |
|---|-----|------------------|-----|
| | | ne Documentation | |
| | | Menu Screens | |
| | | Player Selection | |
| | | Game Screen | |
| | | .1 Balance Mode | |
| 3 | Wha | at's next | . 7 |

1 Development Status

To summarize the first couple of weeks of the development phase, we have some bad as well as good news to tell.

Let us start with the downside:

Due to several reasons we faced a tough beginning of the implementation phase. It took us more time than expected to kick-start the whole project and to get used to the XNA framework.

However, the fact that we had spent a lot of time on planning the overall software architecture proved soon to be very valuable.

While discussing with other people we learned that most teams had problems with external physical libraries – mostly due to performance constraints. Since our game does not require a very sophisticated physical engine, we decided to implement our own rigid body simulator. Unfortunately it turned out to be much more difficult than expected. Major bugs kept us busy for many hours and hindered us to focus on other things. However, we are happy to announce that by now it works almost flawlessly! We think that even though it was not planned in the beginning, we therewith have added another important technical computer graphics element to our project. Additionally, it allows us to configure the engine completely to our needs and tune it as much as possible.

As a result of this we have to admit that we slightly lack behind our initial development schedule. By now we have fully finished layer one but we are still heavily working on layer two.

Positive aspects

Even though we are behind schedule we are still of very good mood. The last couple of days showed us that we are on the right track and progress was immense. The well-founded basis is set and helps us to quickly layer functionality on top of it. We thus are very confident that we will be able to catch up soon and finish the project in time.

2 Game Documentation

This chapter is meant to shortly document what our game is about up to now and how to interact with it.

2.1 Menu Screens

We included an existing menu structure from the XNA community into our project and adapted it to our needs. The navigation should be self-explanatory.



2.2 Player Selection

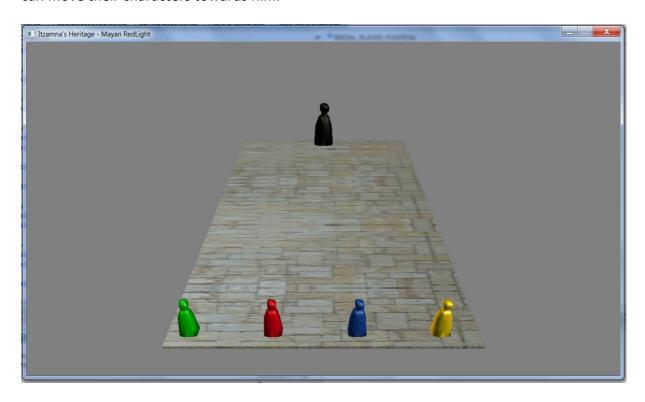
Here the players can select the colors they want to represent in the game. The screen updates itself automatically when any game pad gets connected or disconnected.

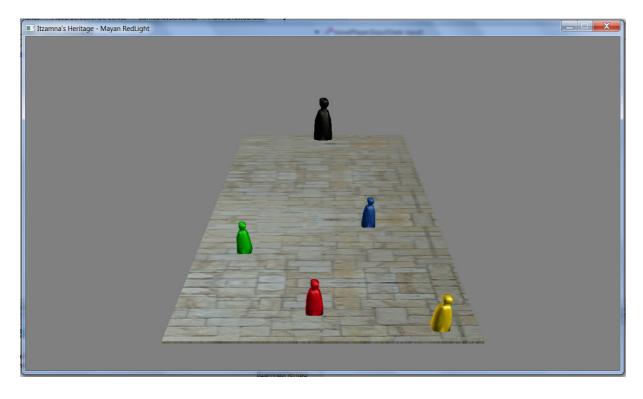


2.3 Game Screen

2.3.1 Normal Game Mode

The initial setting shows the players (up to four) on the starting line facing the guard at the end of the playground. As long as the guard is hiding (here denoted as "black"), the players can move their characters towards him.

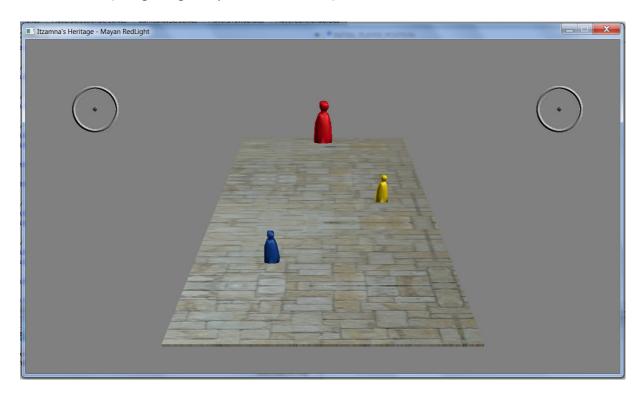




2.3.2 Balance Mode

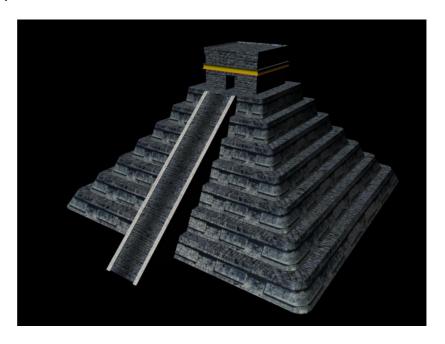
This image shows the situation where the guard is watching (here denoted as "red"). This tells the players to immediately stop their movement by activating the so called "balance mode". To activate the balance mode, the players have to trigger the left and right trigger of their game pad together and keep them pressed!

Each player has now to keep his character in balance by keeping the little bullet within the circled frame (using the game pad's thumb stick).



2.3.3 New Models

We are in the process of adding new models into the game. One of the new models is the Mayan temple which the players have to reach:



3 What's next

What are the tasks we are going to do next?

- Finish the basic game logic in order to have a playable game. This involves further development of the guard AI and meaningful interaction with the player's balancing mode.
- The visual elements are essential for a game to be appealing. That's why we want to integrate the already created models as soon as possible.
- Fluid simulation: We haven't had time so far to implement our main graphical element. However, we have read a couple of papers and figured out how we want to implement it. Now it is the moment to get it done!
- Power ups: As soon as the basic gameplay is set, we will begin to implement the first power-ups.

We are confident to finish these tasks in a reasonable amount of time and to catch up step by step.