

KITES

Clock Game



Official Game Design Document

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1. Game Overview

a. Introduction

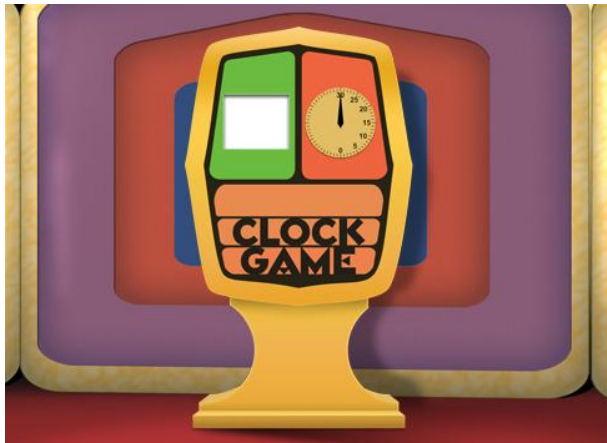
Clock game is a math-puzzle game in a fun space theme. The main focus of the game is concept of 'Elapsed time' for middle school students. The goal of the game is to help the spaceship reach earth. The game features both single and multiplayer mode.

b. Genre

Maths-puzzle game

c. One-line concept

"Clock game in Angry-Birds-Space theme"



d. Platform / Special setup

The game is developed for **SMALLab** platform. (<http://smallablearning.com/smallab>).

e. Target Audience

The game is targeted for Middle school students - most specifically targeted at ones who are finding it hard to read Analog time .

f. Intended playtime

The game will be conducted by the teacher and played with the whole class or a smaller group. Hence the average playtime can last for a typical class hour - **40 minutes to 1.5 hours**.

g. Aesthetics

Style : Cartoony and Fun-for-kids.

Theme : Exploration of Outer space and planets.

Sound : Music, Sound Effects → Cartoony.

2. Story

a. Mood

- Playful
- Funny

b. Outline

The lead character is a spaceship that is making its way back to Earth. Players must assist the spaceship reach sooner by answering all the clock related questions.



3. Core Features

a. Camera

Our game will feature **Side-View** camera.

- Camera will be locked on to the central clock.
- Completing right answers will change the clocks.



Reference Camera : Camera of Angry Birds-Space

b. Input Device

'Wands' of the SMALLab platform - the main input device of the game.



Single player experience will use only one wand.

Multiplayer will need respective number of wands. The system supports a maximum of 3 wands.

The game will also use input from the 'Remote Control' connected to the SMALLab system.

c. Gameplay Features

- Google Doc Customization : The desired set of 'elapsed time' questions will be entered in the Google doc by the teacher. These questions will be imported into the game as a XML.
- Gameplay : The questions are separated into three different modes depending upon the given data and variables. The game will identify and play the appropriate mode based on the current question. The teacher can also randomize the questions for the students.
- Feedback-button : The game is intelligent enough to recognize if the answer is right or wrong. But the teacher has to press the button in the remote to make the game check the answer. The button is used to submit the answer to the game to produce the appropriate feedback.
- AM-PM shift : The game keeps tracks of the AM-PM shift, when the time moves over 12'o clock.
- Sky-color change : Depending on the time, the background sky will get darker or lighter dynamically to represent night and day.

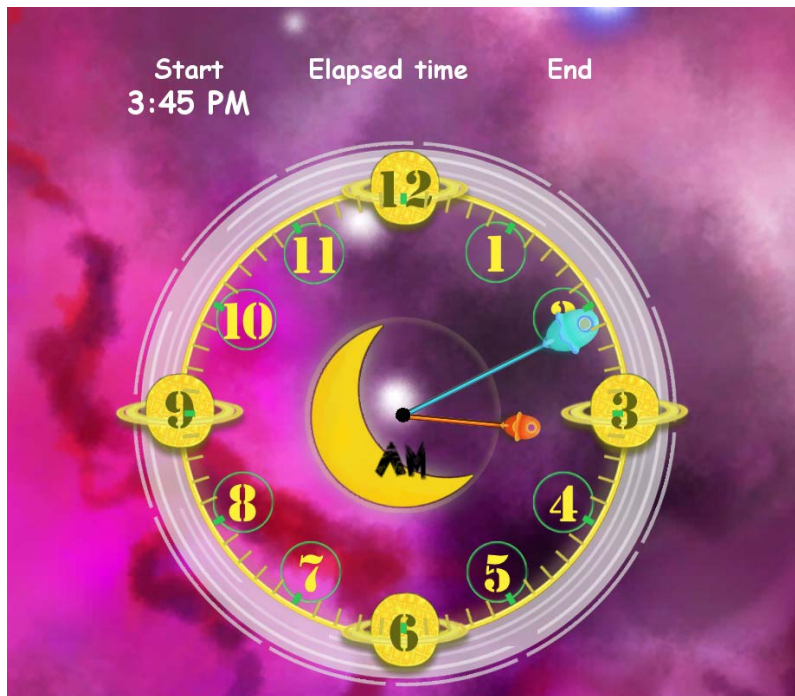
d. Controls

<u>ACTION</u>	<u>GESTURE</u>
Move the 'minute hand'	The wand pointer automatically attaches itself to the minute hand. So move the wand to rotate the minute hand of the clock.
Move the 'Hour hand'	There is no control for moving the hour hand. The hour hand updates automatically based on the rotation of the minute hand.
Increase/Decrease the time counters	The hour and minute counters in one of the game modes can be increased or decreased by pressing the '+' or '-' buttons.
'Submit' the answer	After setting the answer, the answer can be checked if right, by pressing the button in the Teacher's remote.

4. Game Modes

a. 'Set the Clock' Mode

- Overview : The first mode is designed for 3rd graders and lower. The players will be given the digital time and they have to set the right time in the Analog clock.
- Given : Digital Time
- To do : Set time in Analog clock



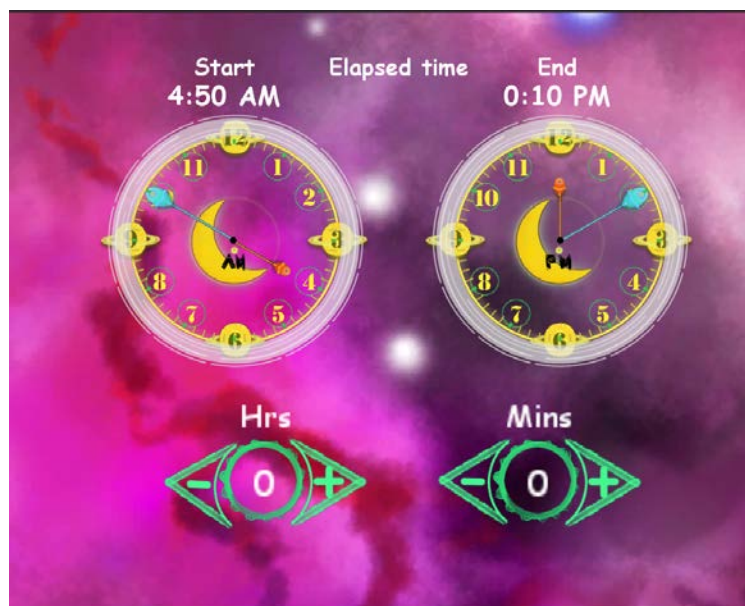
b. 'Find Elapsed time' Mode

- Overview : The second mode is designed for 4rd graders. They will have to calculate the time elapsed between the start and end time.
- Given : 'Start' time and 'End' time
- To find : Elapsed time



c. 'Find Start/End time' Mode

- Overview : The third mode is designed for 5rd graders. They will have to calculate the one of the times using the elapsed time and the other time.
- Given : Elapsed time and one of the times (Start or end)
- To find : The other time (End or start respectively)



d. Multi-player Mode

- Overview : All three modes of the single player game are redesigned in the multiplayer mode. This multiplayer mode has a 'spaceship race' setting. The students are split into two groups and they have to compete against each other.

