

STAGE 1:

PROJECT DIARY

Oct 1:

Formed the team

Oct 6 :(8:30 AM TO 11 AM)

Discussed about the projects given.

Came to a conclusion of doing Chain Reaction game as our project.

Searched about all types of versions of the game and analysed its features.

Oct 10 :(9 PM TO 11:30 PM)

Decided what to do in the game.

Discussed what all graphic features can be implemented in the game.

Installed code blocks simple_cpp and allegro in visual studio.

Oct 12 :(2:30 PM TO 5.30 PM)

Discussion with TA about the project.

Learnt how to start the project.

Learnt basics of object oriented programming and min max algorithm.

Discussed the ideas for giving artificial intelligence to the computer in the game.

Oct 15 :(10 AM TO 1.30 PM)

Designed the algorithm for various moves of players in game and implementing them using c++.

Discussed about the method of giving artificial intelligence.

Oct 16 :(8.30 PM TO 11 PM)

Wrote the sample code without using graphics.

Documented the SRS file.

Oct 18 :(10.30 AM TO 1.30 PM)

Made the c++ code for the game, modified the errors and compiled it.

Tested the code for any bugs in the program.

Completed the project report.

Prepared the draft user manual.

STAGE 2:

Oct 23:(2:00 PM TO 5:00 PM)

Explored the graphic libraries suggested and few common ones. Downloaded allegro and tried to link it with codeblocks. Experimented on simple cpp. Installed visual studio and tried to create Win32 app. Linked all the directories successfully from allegro in Visual Studio.

Oct 24:(1:00 PM TO 3:00 PM)

Tried to learn SDL library functions. Searched different graphics libraries and finally decided to use SFML. Downloaded and linked codeblocks with SFML and did some experiments to explore its features.

Oct 25:(8:00 PM TO 11:00 PM)

Read the tutorials on SFML/Dev.org. Practiced how to access and handle a window. Successfully created our game window. Learnt how events are triggered in the window. Accessed control on keyboard events.

Oct 26:(2:00 PM TO 5:00 PM)

Learnt how to load images into the window. Loaded different background images for the game and controlled them as a user. Started the code for the project using c++ and including sfml libraries.

Oct 28:(7:00 PM OT 10:30 PM)

Searched background images and created the startup page of the game using different member functions of Renderwindow class. Wrote the code using c++ utilities and applied it on sfml functions. Also created the menu page using MS Paint.

Oct 30:(8:15 PM TO 10:15 PM)

Loaded the menu page into the game .Started working on multiplayer. Accessed Mouse into the game. Using mouse menu was made ready to be used by the user. Created the credits page. Learnt that window can be passed as parameter by using classes or structs and making it public from our TA.

Nov 2:(2:00 PM TO 5:00 PM)

Wrote code for starting a new two player game from menu using mouse. Created images for different backgrounds for each player using AutoCAD and MS Paint. Wrote code for shifting players after each one plays his turn.

Nov 6:(8:30 PM TO 10:15 PM)

Wrote code for drawing orbs in the position where the mouse is clicked. Set the limits for placing balls inside the respective grids. Also validated the inputs provided by different players while playing.

Nov 15:(10:00 AM TO 1:00 PM)

Took c++ code from stage 1 code. Declared and wrote the functions for fission(fission1,fission2), termination condition of the game and critical mass. Used these functions to get the value of each square in the grid of the game in terms of numericals.

Nov 16:(2:00 PM TO 5:00 PM)

Wrote code for displaying the balls and their explosions of both the players. Wrote the function plotter which draws the balls in the grid respectively. Completed the two player version of the game. Loaded images for player winning conditions.

Nov 19:(9:00 PM TO 11:00 PM)

Wrote code for going back to the main menu after completing the game. Wrote code playing two player multiple times to the user's wish. Added animation to the main menu and a startup page using time function provided by SFML as it does not give functions for animations.

Nov 20:(1:00 PM TO 5:00PM)

Created algorithm for single player game. Accessed single player option in main menu. Wrote c++ code for giving artificial intelligence to the system turn. Loaded images images for player win and lost situations. Wrote code for coming back after completing single player game. Wrote code for mouse moved events in the window. Wrote highlight function which highlights the position in the grid which mouse points on.

Nov 21:(9:00 PM TO 12:00 AM)

Debugged the code for artificial intelligence and optimized it. Loaded music in the game. Added sounds to different events in the game. Used time function to create special effects in the game like vibration and rotation. Loaded images for back button. Wrote code for allowing the user to go to main menu using back button. Wrote code for loading instructions in the main function.

Nov 23:(4:00 PM TO 11:00 PM)

Used file pointers and accessed regedit file to save game and all the required information to continue the game at any point of time.Loaded the save button image and wrote code for saving the game at any point of time.Wrote code for loading game from saved game.Wrote code for undo.Loaded undo button image and accesed in both single and two player games to undo his previous turn.