

Project Proposal



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Project Title : Pacman

Problem statement:

Pacman is a childhood favourite game of thousands across the country and thus when we sat down discussing a topic for our project we thought making it would be good idea .

When looked into the insights of the game we found that it requires finding a suitable algorithm such that the ghosts finds the shortest path in order to kill the pacman depending on his current position and we will also get a feel of the object oriented programming environment.

Solution:

Searching more about the game we found that it will be quite interesting to code as maths forms an integral part of the algorithm and we'll get to learn to code:

1. Objects and classes
2. Shortest path finding algorithm (A* path finding algorithm)
3. Graphics (we had to take a look at the important graphics libraries and learn to use them)

When we went through the complete theory of the game we get to learn that pacman has 4 types of ghosts each having its own mechanism of trying to kill the pacman and thus each of us will get a chance to form classes code A* algorithm in a specific manner depending on the nature of the ghost and its strategy.

Graphics play an important and fascinating point for every game and thus we thought of capitalizing on it .

Sample input-output:

Being a game it requires no input as such, we just have to run the program in order to reach the interface window and from there we can start playing the game .

Discussion:

Discussing on the time it will take to learn and think of suitable algorithms and then code them we came

to the conclusion that the project should take not more than 3 weeks plus an additional week for learning graphics .

At this point we have exactly a month before submission of the project and thus considering the time available and the interesting problem statement it will be a good beginning to our journey of programming that lies ahead in the years to come .