PROJECT BASED LEARNING

LEARNING SELECTION AND ITERATION STATEMENTS OF C++ .....USING GAME PROGRAMMING

Entry Event : Lets Play Games

"The mind is not a vessel to be filled but a fire to be kindled."

- Students were made to play two simple computer games that had been developed using C++ by their teacher.
- Objective was to generate the interest of the students in coding.
- They were then also made to watch a short video on the importance of coding.

Game 1 : Number Guessing Game

Game 2 : Guess my Movie

RULES OF THE GAME:

Here is how we play the game

I will think of a random English movie name

You have to guess the movie

You will get only 10 attempts to get to the answer

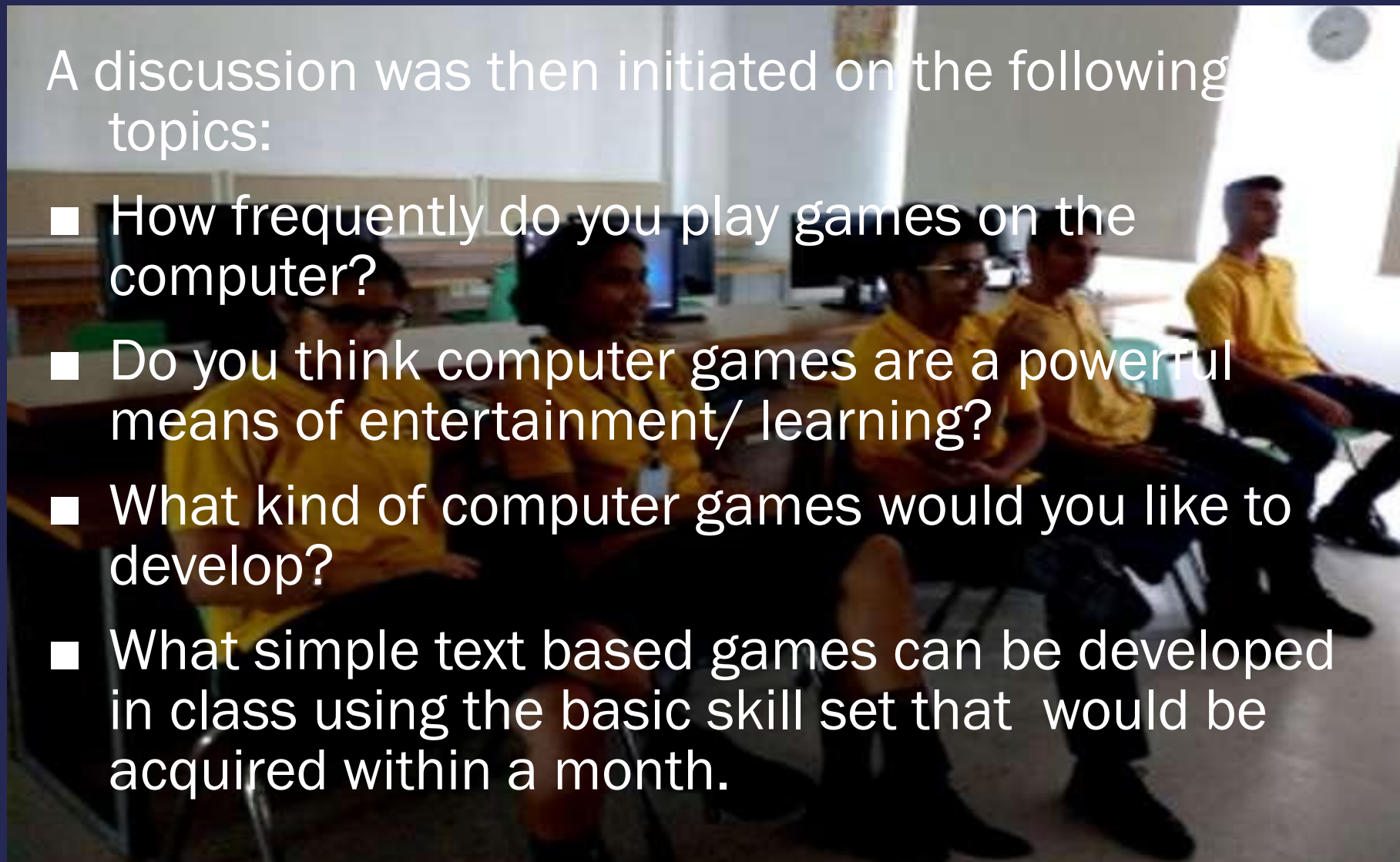
Each time you can guess a single character or the entire name of the movie.

If you guess a character and it is correct I'll show you where it lies.

If you guess the entire movie name correctly you win, else you lose.

Ready to go ? Press any key

Kindle the Fire : Discussion



A discussion was then initiated on the following topics:

- How frequently do you play games on the computer?
- Do you think computer games are a powerful means of entertainment/ learning?
- What kind of computer games would you like to develop?
- What simple text based games can be developed in class using the basic skill set that would be acquired within a month.

Learning The Tools

- The next few sessions were dedicated to teaching the students the tools required for working on their projects.
- The students were introduced to the different kinds of flow of control constructs (sequence, selection and iteration).
- Simple programs that made use of these constructs were demonstrated in class using a computer and a projector.
- Programs based on these constructs were also attempted by the students in the form of drill sheets.
- The students also tried out varied problems on the computers in the lab.
- Regular assessment tests were conducted to check the student's understanding of these constructs.

Putting It All Together

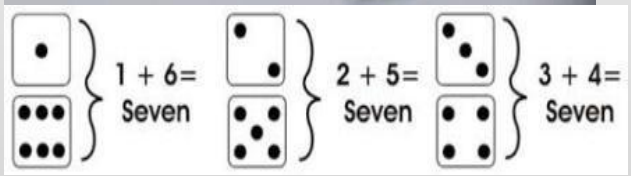
- Students were then divided into groups of two each.
- Each group was asked to think of a game that they would like to develop.
- The teacher acted as a facilitator helping them assess the feasibility of their ideas.
- The students were encouraged to be creative.

The Grand Finale

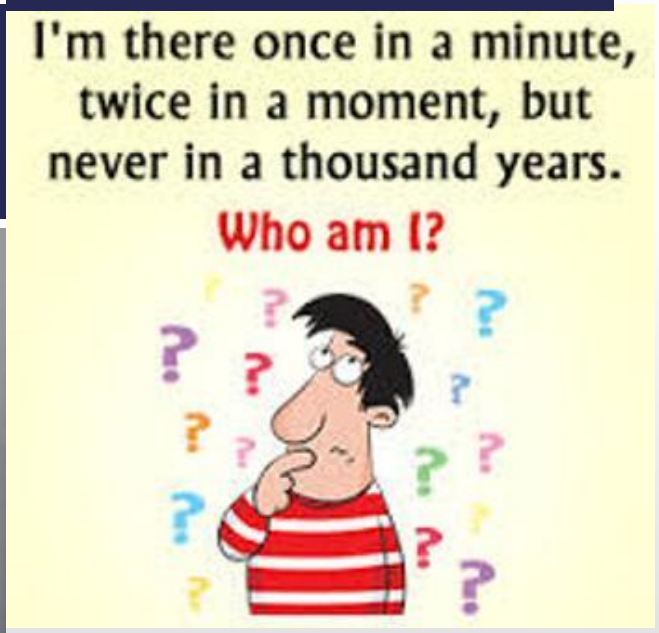
- Each group finally made a presentation of their project in the class.
- The group allowed the students of the other groups to play the computer game that they had developed.
- Each group then offered suggestions to the other group on how they could have improvised the gaming experience.

Snapshots : Student Ideas

Rolling a pair of dice to get a SEVEN



Fun With RIDDLES



Snapshots : Student Ideas

QUIZ TIME
Check your aptitude with numbers

Snapshots : Student Ideas

Mathematics Fun Games

Guess my Card