

PROJECT REPORT

Introduction:

My project is based on javascript and html canvas. It is used for simulation of reflection of light rays on mirrors, which are reflective on both sides.

Problem Description:

The main problem was to calculate which of the mirrors will the light ray reflect from and at what time.

Solution:

Calculated at every timestep whether the head of the light ray is on (or near) any of the mirrors and then reflected from the respective mirror.

How To Use:

- First drag and drop the mouse to make mirrors (same as you draw lines in paint). You can draw any number of mirrors.
- Then press Key 'P' and click in the direction in which you want to send the light ray from the center of the canvas.
- If you want to pause the light ray, press key 'H' and to resume , again press key 'H'. You can even draw the mirrors while the simulation is on or it is paused.
- If you want mirrors to be partially reflective, press key 'A'. And to again to be fully reflective, again press key 'A'.

References:

<http://canvas.zense.co.on/>