



Highly Commended

Programming, Apps & Robotics Year 5 - 6

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Science facts

How to play

Fireman Slam

Demo Video



A game of fun, fire and fury

Start game



ELECTRONIC GAME REPORT

Entry Title: Fireman Slam

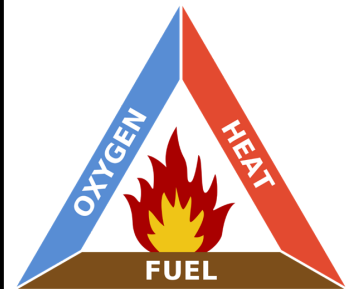
Year: 5-6

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AIM AND SCIENTIFIC PURPOSE

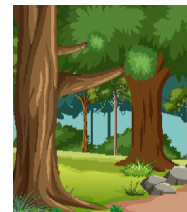
Fireman Slam demonstrates different types of fuels that can contribute to a fire and how they may be effectively extinguished.

Fireman Slam also teaches you the correct extinguisher to use on specific types of fire, such as:



Wood Fires

Water extinguishers put wood fires out by removing the heat and oxygen needed for combustion, also sinking into the wood preventing re-ignition. In Fireman slam water extinguishers are best used against wood fires.



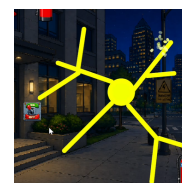
Petrol or Oil Fires

ABE dry powder extinguishers put out fuel fires by expelling a powder called monoammonium phosphate which melts over the fire and cuts off oxygen supply. In Fireman Slam, ABE extinguishers are best against Petrol/Fuel extinguishers.



Electrical Fires

CO₂ extinguishers put out fires by cutting off the local oxygen supply and cools the fire down, removing the heat source. In Fireman Slam, CO₂ is used on electrical fires



Advanced: Electrical Hazards

In the last level players are introduced to a new hazard in the form of an electrical fire. Players must first turn off the electricity to prevent electric shocks and to be able to put out the fire. By disabling the electrical source players are removing the ignition and heat needed for the fire.



DEVICE REQUIRED TO RUN THE PROGRAM

Any laptop can be used to run the program. It must have a keyboard, a mouse (optional) and a screen. The game platform to program, code and host the game is Scratch.



SCRATCH

INSTRUCTIONS ON LOADING THE GAME

To load the game, you must click on the link below. It will take you straight to the game. From here, you click on 'Start Game' and away you go!

<https://scratch.mit.edu/projects/1326849388>

EXPLANATION ON HOW TO PLAY THE GAME

Fireman Slam is a game where your aim is to extinguish fires from a range of different fuel types, in a variety of locations. By extinguishing fires you will gain points, when all are extinguished you will move to the next level.

Controls:

- Arrow keys to move
- Space or left mouse button to shoot - Button must be pressed for at least half a second to shoot.
- U to pick up extinguisher or flip switch.

EXPLANATION ON HOW TO PLAY THE GAME - CONTINUED

Fireman Slam has 5 levels, each with faster-spawning fires across different locations: a farm, petrol station, office, forest, and a city building exterior.

You'll encounter three fire types — **wood** fires, **petrol/oil** fires, and **electrical** fires. Using the wrong extinguisher won't work, so you must grab the correct one before the fire spreads. Touching a fire removes one heart from your three-heart meter. Losing all hearts triggers the *"You just got ashed!!!"* screen, meaning you must restart.

The science facts button teaches fire safety tips that can help during gameplay.

In the final level, an **electrical hazard** appears. electrical bolts will strike until you shut off the power switch. Touching the hazard also costs a heart.

Enjoy!!!

Scan QR code
for demo video.



ACKNOWLEDGEMENT OF AI TOOLS USED

I used AI to generate appropriate images of some backgrounds, the fire extinguishers, the fires and the firefighter character. I also used AI to provide some ideas on how I could make the game relate to science.

ACKNOWLEDGEMENT EXTERNAL SUPPORT PROVIDED

I received some help from my mum and dad who gave me ideas on different ways I can make the game more interactive, interesting and science based. I also had help to write my report.

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