

BIOINFORMATICS PROJECT REPORT

Yash Bhatt Id- 01703607

Prateek Srivastava Id- 01697319

Snake With Virus

- **What problem were you trying to solve.**

- We have made this game for education as well as fun purposes .
- In this game we are showing some harm full viruses.
- We are also giving sort explanation of this viruses before the game will start.
- So player can understand which viruses are harmful and they have to avoid them.
- And in this game there are several levels. And with each new level new bad virus will be added.
- By increasing difficulty of the game. And by adding new levels we can increase game play experience.
- And whenever player gets out, We are showing that by which virus they got out.
- So this is good way to teach kids which viruses are harmful and their effect on our body. And how they can harm us.

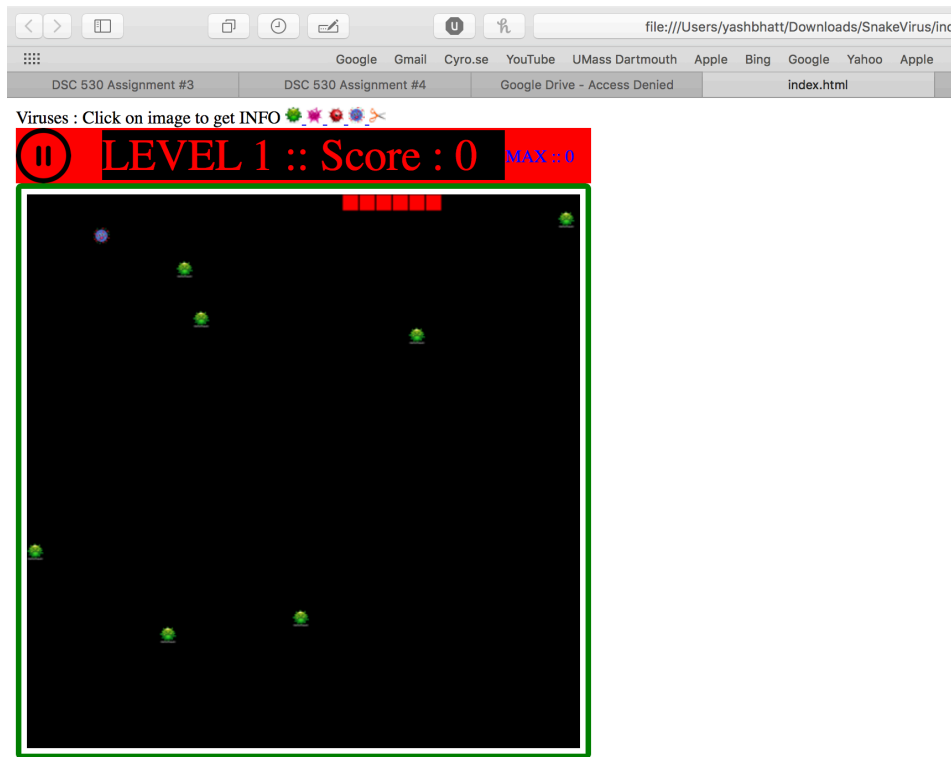
- **What we did to tackle this problem.**

- To teach kids as many viruses as possible we are increased levels.
- So more levels means more viruses.
- And we think if teacher wants to teach particular virus they can add image and description by them self.
- To do so we tried to implement this game with PhP so if anyone wants to add or delete some virus and its detail. They can do so easily. But it was hard to connect it to game and by increasing levels we were difficult to implement.

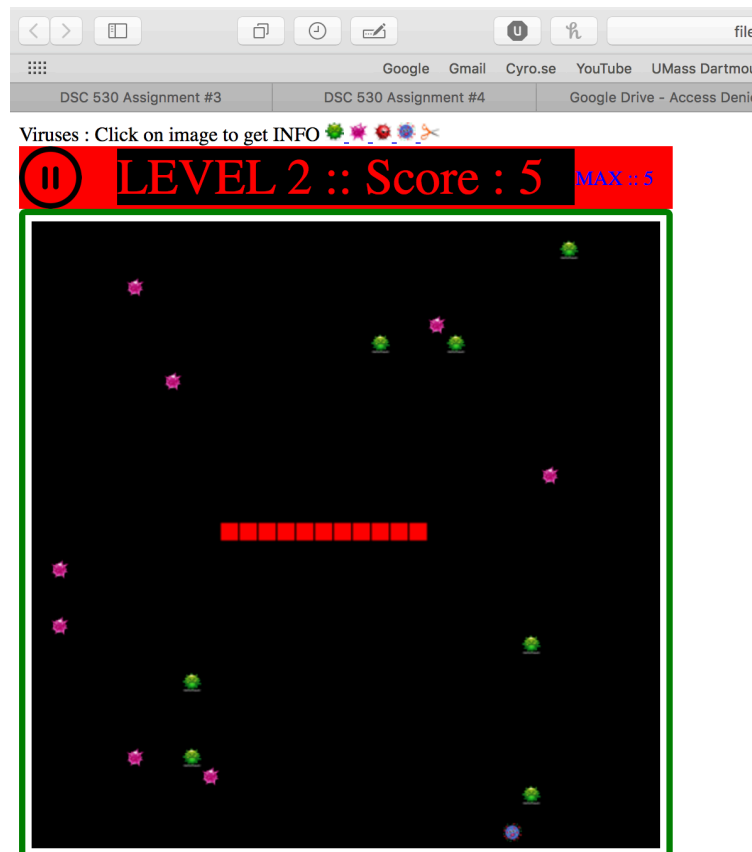
- So we kept 4 levels in the game and information about 4 harmful viruses and 1 good virus.
- Before starting the project I was confident that there are good viruses and on that thought we were gone make game like player can catch more then one good virus.
- But when we started to search we found very few of them like GB-C this virus can slow down effect of HIV virus.
- **Description of our work and screen shots.**
 - This is snake game we have to catch GB-C visas as this virus is good virus.



- This is the beginning of the game. Once we press the play button game will start.
- In below screen shot we have shown how game looks like once we start playing.
- We have also added sound effect to this game.

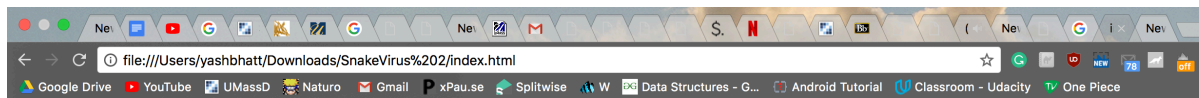


- We have to aware of green viruses as they are HIV viruses. Number of viruses and their positions are randomly generated.
- We have added pause button as well So player can also pause the game when ever they want and game will resume from where player has left it.

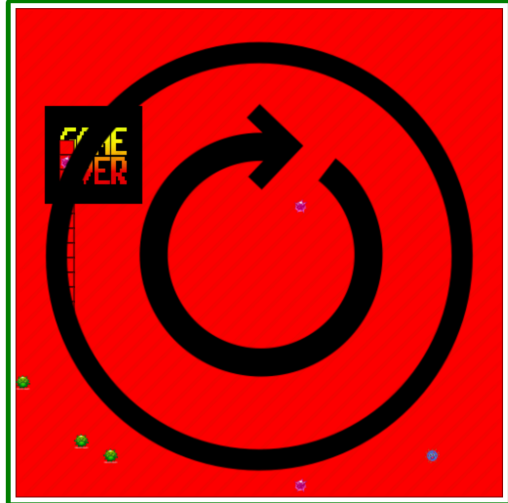


- Player can also see their maximum score.
- After scoring 5 points level will be change and new virus will be added. As you can see in the picture Varicella zoster virus is added.
- And again after scoring more 5 points HPV virus will be added.
- We have added scissor to cut size of snake. If we catch scissor length of snake will be reduced by 3 blocks.
- If use will catch some harm full virus game will be over and we will explain by which virus game was over and effect of that virus.
- Below We have shown screen shots explaining each harmful virus.





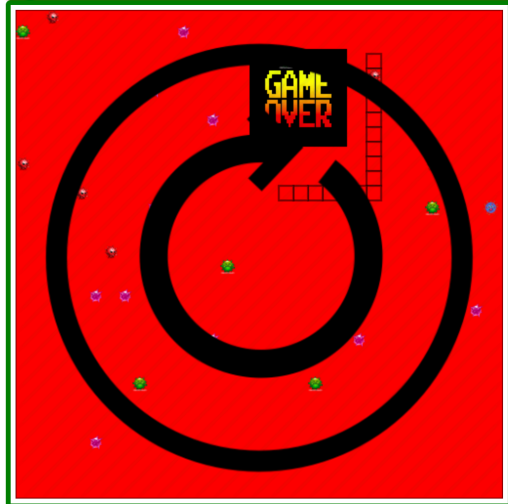
LEVEL 2 :: Score : 6 MAX : 6



Game is over.
You touched HPV virus.
HPV is the most common sexually transmitted infection (STI). HPV is a different virus than HIV and HSV (herpes).
79 million Americans, most in their late teens and early 20s, are infected with HPV.
There are many different types of HPV. Some types can cause health problems including genital warts and cancers.
But there are vaccines that can stop these health problems from happening.
Your score is 6



LEVEL 3 :: Score : 10 MAX : 10



Game is over.
You touched VZV virus.
Varicella zoster virus or varicella-zoster virus (VZV) is one of eight herpesviruses known to infect humans.
It causes chickenpox (varicella), a disease most commonly affecting children, teens, and young adults, and herpes zoster (shingles) in older adults; shingles is rare in children.
VZV multiplies in the lungs, and causes a wide variety of symptoms.
After the primary infection (chickenpox), the virus goes dormant in the nerves, including the cranial nerve ganglia, dorsal root ganglia, and autonomic ganglia.
Many years after the patient has recovered from chickenpox, VZV can reactivate to cause neurologic conditions. Your score is 10

- **Future Work**

- Once player get out we can ask them some Multiple choice question, If the answer it correctly they get a life.
- By doing so players involvement will increase.
- Graphics are poor in future some one can improve graphics.
- We can connect it to data base so anyone can add viruses and their information.
- We can also maintain data base of users and their scores.
- Player can login with facebook and even can share their score with their friends.
- We are not increasing speed of snake as level go up in future some one can also work on this.

- **Technologies we are using to develop this game.**

- Javascript
- CSS
- HTML
- We have used Canvas library to draw viruses and same.