

ZENSE PROJECT REPORT

1. PROJECT IDEA – The idea of this project is to create a webpage that has a simulation of a spring system. We can also calculate the amplitude of the spring-mass system by taking the values of mass and spring constant from the user. The simulation consists of a spring-mass system. This simulation is user interactive. The user can change the values of the damping constant, stiffness, frequency and the mass of the block and the spring-mass system will move accordingly.

2. TECHNOLOGY USED AND IMPLEMENTATION DETAILS – The project uses the following languages:-

- HTML
- CSS
- JavaScript

3. LINKS TO THE VIDEO -

https://youtu.be/SPdFL_gh_zA

The video is in MP4 format which may not open in all browsers. It can be viewed on the mobile phone.

4. FUTURE SCOPE OF THE PROJECT – The project can be improved in the future by adding a feature which generates a displacement-time graph of the spring-mass system based on the values entered by the user. I want to simulate other physics concepts also like (i) Simple Pendulum, (ii) Buoyancy and add it to this project.

5. EXPERIENCE DOING THIS PROJECT – This project helped me a lot to learn the basics of HTML, CSS and JavaScript.

6. REFERENCES

- <https://www.codecademy.com/>
- <https://www.khanacademy.org/>
- The Coding Train (Youtube Channel)