

Greetings

*A project submitted in partial fulfillment of the
requirements for the award of the degree of*

**Bachelor of Technology
in
INFORMATION TECHNOLOGY**



**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,
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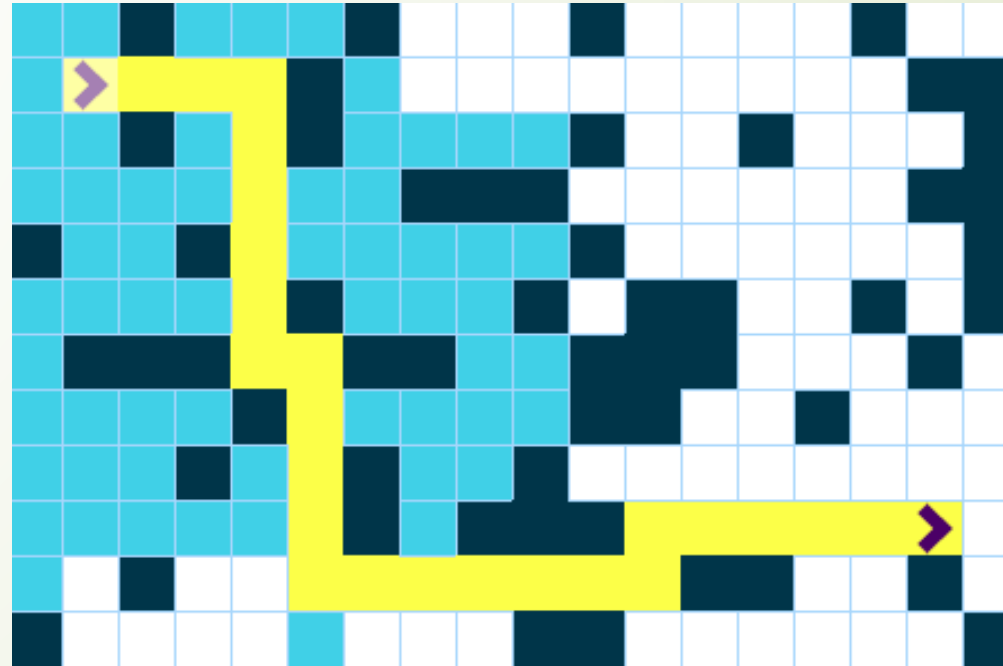
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PROBLEM OUTLINE

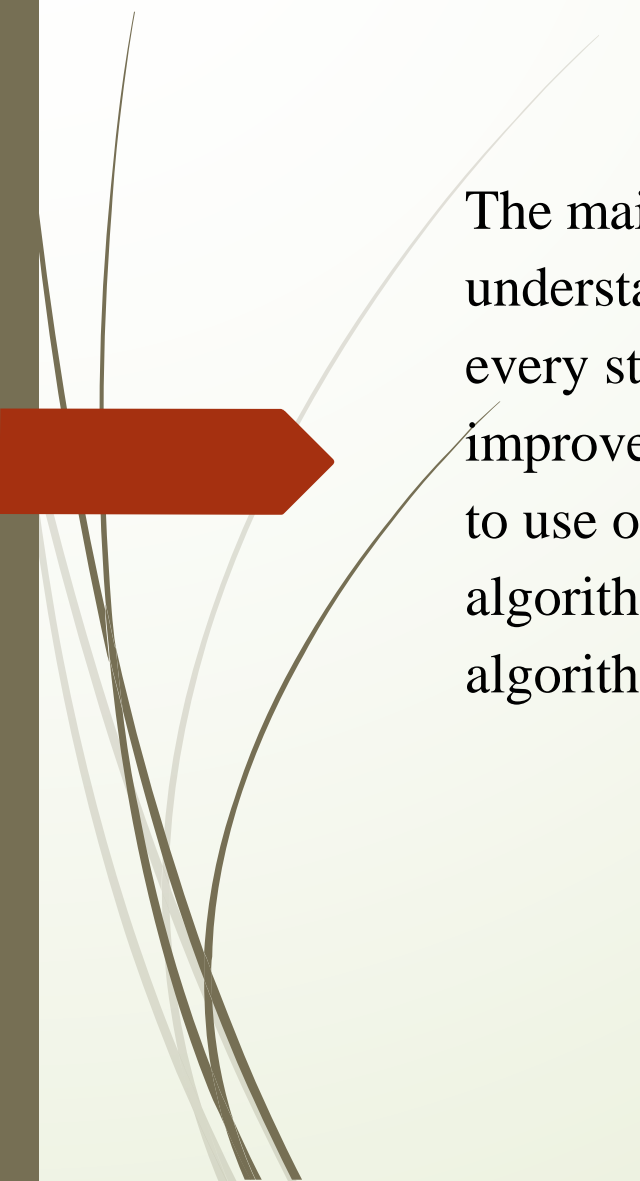
The number of students pursuing computer science is steadily increasing. There are various online resources that facilitate learning of computer science through a thorough explanation of the material and what it is. One such core component is algorithms. An algorithm, in its simplest form, is a process or set of instructions that are followed in problem-solving operations and other calculations, especially by a computer.

ALGORITHM VISUALIZER



The project '**Algorithm Visualizer**' is a web site which is free of cost that provides you a platform to learn algorithm with help of visual animations and provides you with an innovative and interesting way to learn Coding. It will not only provide a visual animation but also with code snippets that help the comprehend code line by line, ensuring smoother learning..

PROJECT OBJECTIVE



The main objective of this project is to help you remember and increase your understanding of the Path-finding algorithms at zero cost and totally free to every student in world and improve their approach to real world problems and improve their creativity. The prime objectives of the project is building an easy to use or user-friendly interface with some of the most well known path finding algorithms. This will help overcome the limitations of virtual learning of algorithm for the users.

FRONT END DEVELOPMENT

Front-end web development, also known as client-side development is the practice of producing HTML, CSS, and JavaScript for a website or Web Application to allow direct interaction for the user.



USER INTERFACE DEVELOPMENT

A Web user interface or Web app allows the user to interact with content or software running on a remote server through a Web browser.

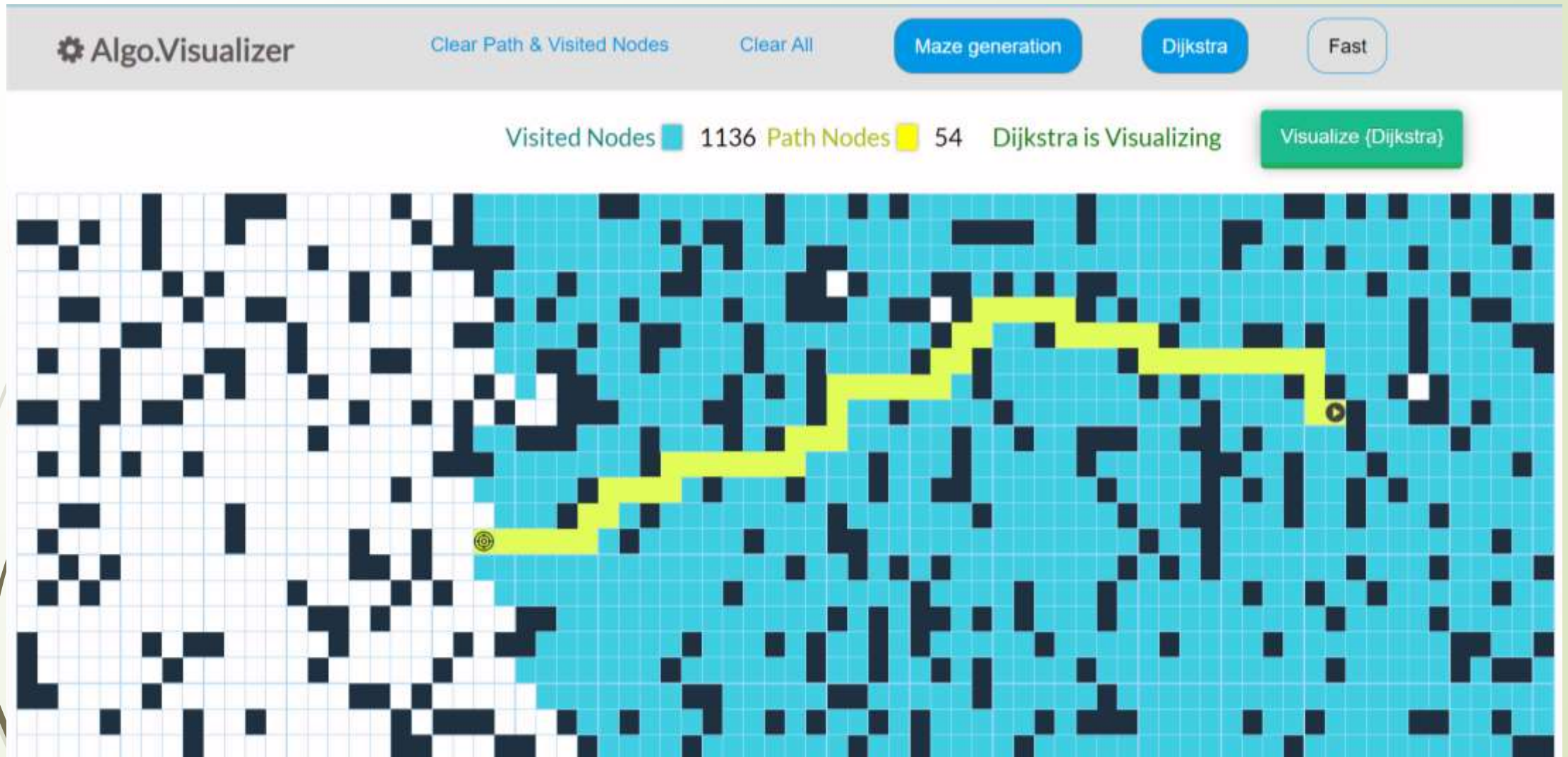
- Virtual design
- Interactive design
- Information Architecture
- JavaScript



SNAPSHOT OF INPUT CODE

```
16
17 <body ondragstart="return false;" ondrop="return false;">
18   <header>
19     <div class="navbar">
20       <h1 class="nav-h">
21         <i class="fa fa-cog fa-spin"></i> Algo.Visualizer
22       </h1>
23       <div class="speeddropdown">
24         <button onclick="DropDown(event)" id='speedbtntext' class='btn-speed'>speed<i style="padding-left:10px"
25           class="fa fa-caret-down"></i></button>
26         <div class="speeddropdownContent">
27           <a onclick="changeSpeed(this)" class='speed-link' href="#">Fast</a>
28           <a onclick="changeSpeed(this)" class='speed-link' href="#">Slow</a>
29           <a onclick="changeSpeed(this)" class='speed-link' href="#">Average</a>
30         </div>
31       </div>
32       <div class="algodropdown">
33         <button onclick="DropDown(event)" class='btn-algo' id='algobtntext'>Algorithm's<i
34           style="padding-left:10px" class="fa fa-caret-down"></i></button>
35         <div class="algodropdownContent">
36           <a onclick="changeAlgo(this)" class='algo-link' href="#">Breadth first search</a>
37           <a onclick="changeAlgo(this)" class='algo-link' href="#">Best first search</a>
38           <a onclick="changeAlgo(this)" class='algo-link' href="#">Dijkstra</a>
39           <a onclick="changeAlgo(this)" class='algo-link' href="#">A *</a>
40         </div>
41       </div>
42       <div class="MazeDropDown">
43         <button onclick="randomMaze()" id="mazebtntext" class='btn-maze'><span></span>Maze
44         generation</span></button>
45         <!--<div class="mazaDropDowncontent">
46           <a class='maze-link' onclick="randomMaze()" href="#">Random Maze</a>
47         </div>-->
48       </div>
49       <div class="speeddropdown" style="margin: 0;padding: 0;">
50         <button onclick="clearAll()" class='speeddropdown btn-speed' id='btnclearswalls'
51           style='border: none; color: ■ rgb(0, 151, 230);'>Clear All</button>
```

SNAPSHOT OF OUTPUT



DEPLOYMENT

Software deployment includes all of the steps, processes, and activities that are required to make a software system or update available to its intended users.

Deployment is the mechanism through which applications, modules, updates, and patches are delivered from developers to users.

GitHub provides hosting for software development and version control using Git. The best and most used features of GitHub are project management, collaborative coding, and public repositories



REFERENCES

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2. [Blass, Andreas; Gurevich, Yuri](#) (2003). "[Algorithms: A Quest for Absolute Definitions](#)" (PDF). *Bulletin of European Association for Theoretical Computer Science*
3. <https://content.techgig.com/6-things-front-end-developers-should-learn-in-2020/articleshow/76496481.cms>
4. <https://medium.com/digio-australia/user-interface-development-in-the-next-5-10-years-f19edcd6d0b0>
5. <https://medium.com/edureka/continuous-deployment-b03df3e3c44c>
6. <https://github.com/jacksonjj2-0/JJ>

THANK
YOU