

Software Systems Lab: Outlab  
L<sup>A</sup>T<sub>E</sub>X

Name: Yash Kulkarni  
Roll No: 210110069

August 30, 2022

# Contents

0.1	Abstract . . . . .	2
0.2	Introduction . . . . .	3
	0.2.1 About . . . . .	3
	0.2.2 Contents . . . . .	3
0.3	Background . . . . .	4
0.4	Algorithm . . . . .	5
0.5	Code . . . . .	6
0.6	Tables . . . . .	7
0.7	References . . . . .	8

## 0.1 Abstract

This report is made on Overleaf.  
It is for Outlab 4 of CS251 lab.  
It has various sections and subsections on

1. Introduction,
2. Background of the outlab
3. Images
4. Algorithms

## **0.2 Introduction**

### **0.2.1 About**

- Made in Latex
- Made on Overleaf.com
- Done for Outlab 4
- Contains various types of features such as
  - table of contents,
  - itemization,
  - images with caption,
  - table with caption,
  - minipage and
  - bibliography

### **0.2.2 Contents**

1. Images
2. Table
3. Itemizations
4. Minipage
5. Bibliography

## 0.3 Background

L<sup>A</sup>T<sub>E</sub>X is widely used in academia for communication and publication of scientific documents in many fields, including mathematics, physics, economics, linguistics, quantitative psychology, philosophy, and political science. It also has a prominent role in the preparation and publication of books and articles that contain complex multilingual materials, such as Sanskrit and Greek. L<sup>A</sup>T<sub>E</sub>X uses the TEX typesetting program for formatting its output, and is itself written in TEX macro language

**(This is how the minipage feature works)**

## 0.4 Algorithm

```
Input : A graph and starting root vertex of the Graph  
Output: All vertices reachable from root are labeled as explored  
1 for each node n in Graph: do  
2 |   n.distance = INFINITY  
3 end  
4 Q.enqueue(root)  
5 while Q is not empty: do  
6 |   for each node n that is adjacent to current: do  
7 | |   if n.distance == INFINITY then  
8 | | |   n.distance = current.distance + 1 n.parent = current  
9 | |   end  
10 |   end  
11 end
```

**Algorithm 1:** Breadth First Search Algo

## 0.5 Code

Listing 1: Hello World! in C++

---

```
1. include < iostream.h >

2.

3. int main(){

    (a) std :: cout << "Hello World";

    (b) std::cin.get();

    (c) return 0;

4. }
```

---

A	B	Answer
0	0	0
0	1	1
1	0	1
1	1	1

Table 1: OR Gate

## 0.6 Tables



## 0.7 References

Here are the references of the sites which I want to cite [2] and [1]

# Bibliography

- [1] Federico Garcia. Latex and the different bibliography styles. *The PracTEX Journal*, 2:2007–2, 2007.
- [2] S Parthasarathy. Demystifying latex bibliographies. *The PracTEX Journal*, 2, 2007.