AI Course Final Project

Author: Shimu Begum
Created with Pi

CONTENTS

01

Introduction

Introduction

1. This AI course focused on both theoretical concepts and hands-on lab tasks.

2. The project includes:
   - Algorithm implementation
   - Game development
   - Use of AI tools

02

Course Objectives

Course Objectives

Understand core concepts of Artificial Intelligence

Implement classical search algorithms

Develop games using AI techniques

Explore modern AI tools for presentations and videos

03

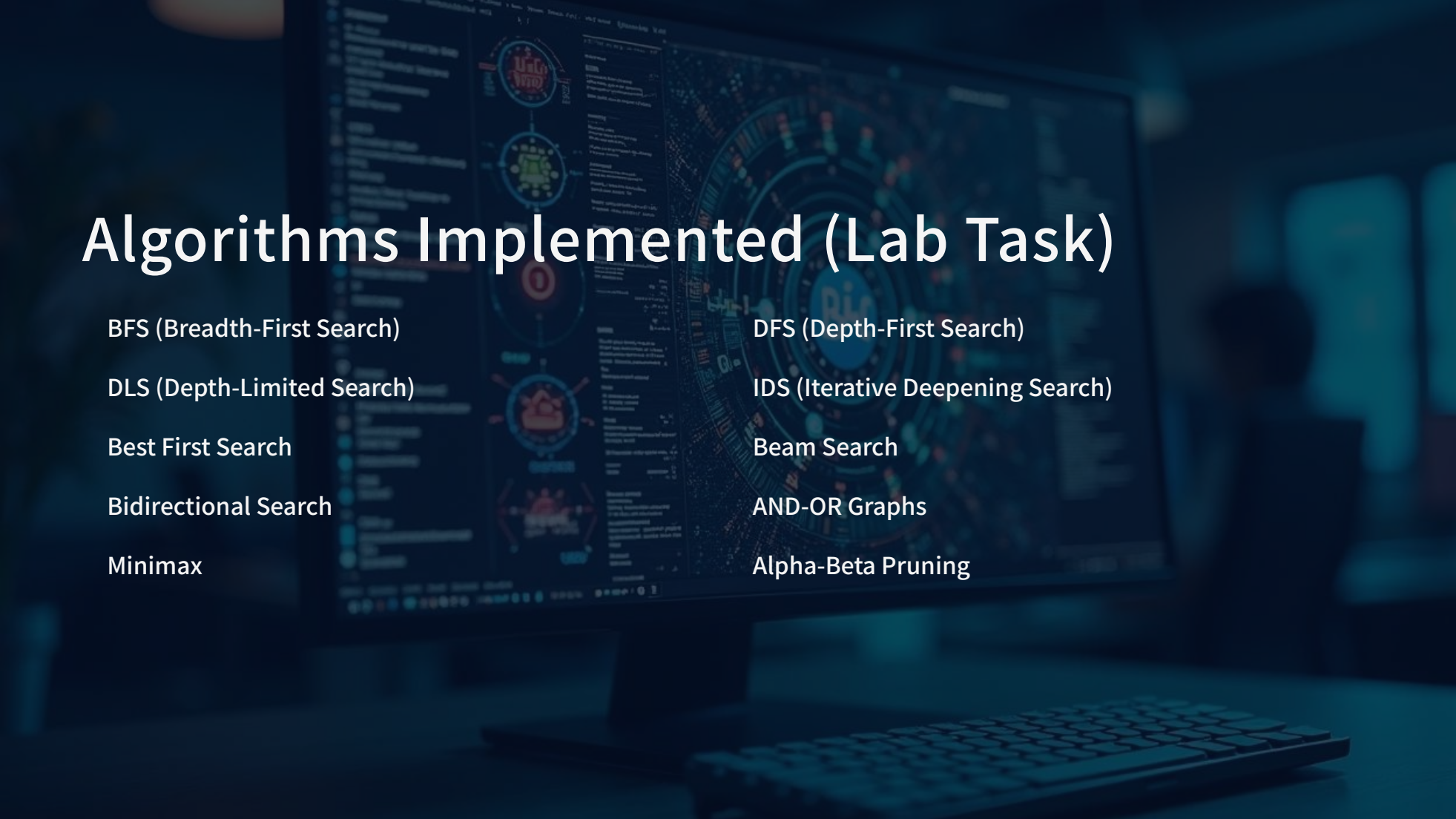
Theory Topics Covered

Theory Topics Covered

1. Introduction to AI
2. Problem Solving
3. Uninformed and Informed Search
4. Game Playing
5. AI Tools Overview

04

Algorithms Implemented (Lab Task)



Algorithms Implemented (Lab Task)

- BFS (Breadth-First Search)
- DFS (Depth-First Search)
- DLS (Depth-Limited Search)
- IDS (Iterative Deepening Search)
- Best First Search
- Beam Search
- Bidirectional Search
- AND-OR Graphs
- Minimax
- Alpha-Beta Pruning

05

AI Game - Chess

AI Game - Chess

1. Two-player game with AI opponent
2. Algorithm used: Minimax with Alpha-Beta Pruning
3. Developed using Python and Pygame

06

AI Game - Snake

AI Game - Snake

Classic snake game

Logic-based AI path movement

Developed using Python

07

AI Game - Tic Tac Toe

AI Game - Tic Tac Toe

1. Human vs Computer
2. Algorithm: Minimax
3. Detects win, lose or draw automatically

08

Tools Used

Tools Used

Video created using: Pictory.ai

Presentation designed with: AI support (ChatGPT/Tome)

Documentation: README written using ChatGPT

09

What I Learned

What I Learned

1. Practical understanding of AI algorithms
2. Building game logic with AI
3. Using AI tools for documentation and presentation
4. Improved coding and communication skills

10

Supervisor & Acknowledgment

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Supervisor: Mr. Razorshi Prozzwal Talukder

Special thanks to my teacher and university

Grateful for AI tools that helped enhance this project

11

Thank You!

Thank You!

1. GitHub Repository: github.com/shimu615/AI-Course

2. Feel free to explore the code, games, and documentation.

Thank You