**UNIVERSITY OF ASIA PACIFIC**

Department of Computer Science & Engineering

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**Artificial Inteligence Lab**

**Course Code: CSE 404**

**Assignment -2**

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|  |  |  |
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**Introduction:**

Nowadays most of the time in our daily life we use Google Map as a Navigator System. Google map suggest us shortest path when we choose our current location and destination. This shortest path is generated based on distance of source and destination.

**Objective:**

In this project our objective is implement a small version of google maps with specific source and destination location with some nodes between source and destination.

**Designed Map:**

***Map For Home to UAP:***

Diagram

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***Short Name and Corresponding Full Name of Nodes:***

|  |  |
| --- | --- |
| **Short Name** | **Full Name** |
| MNK | Manikdi |
| ZC | Zia Colony |
| SC | Sainik Club |
| JG | Jahangir Gate |
| ECB | ECB Chattar |
| WKSP | Workshop Bus Stand |
| M10 | Mirpur 10 |
| AG | Agargaon |
| BS | Bijoy Sharani |
| FG | Farmgate |
| UAP | University of Asia Pacific |

*Table

Description automatically generated****Heuristic Values:***

**Search Tree of The Map:**

Diagram

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**Implementation:**

Graphical user interface, application

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**Result Analysis:**

***From the Map Shortest Path is :***

Manikdi => ECB Chattar => Workshop Bus Stand => Jahangir Gate => Bijoy Sharani => Farmgate => University of Asia Pacific

***Output from Implementation:***



**Conclusion:**

Shortest Path for Start location to Destination location in this Map is Completely same with our Output of Implementation. So, that we can say we use this program for getting optimal path in any given map.