**F20RO – Intelligent Robotics Coursework**

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BSc. Computer Science [Artificial Intelligence]

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Introduction

Task 1 Implementation

Task 1 required us to use Behavior-Based Robotics for implementation of the ‘robot-rat’ problem in the T-maze environment.

Without any starter code, we created our controller file and used Python language for the controller. For implementation, a classes and objects approach was used. In the constructor of the controller class, we set the robot's maximum speed, initial motor velocity, and the initialization of the 8 proximity sensors and 3 ground sensors.

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| --- | --- | --- | --- | --- |
|  | First Run | Second Run | Third Run | Average Time |
| Task 1  T-Maze A | 08:448 | 08:448 | 08:448 | 08:448 |
| Task 1  T-Maze B | 08:320 | 08:320 | 08:320 | 08:320 |
| Task 2  T-Maze A |  |  |  |  |
| Task 2  T-Maze B |  |  |  |  |