# **Learning Outcomes**

## Lab 1

- Learned how to implement a FSM
- Discovered the very basics of automated behaviour

#### Lab 2

- Created a very simple AI to perform a compete in a game of Tic Tac Toe
- Expanded on the rules of behaviour that would be used in later labs
- Learned how to think with AI techniques

## Lab 3

- First taste of GOB
- Learned to write first spike report
- Learned how we can develop rules and action combinations that fit to suit a goal

### Lab 4

• Use basic AI techniques

#### Lab 5

- · Allowed us to create very simple autonomous vehicles
- Implemented Seek, Arrive, Pursue & Flee behaviours
- First steps into predictive behaviours.

## Lab 6 & 7

- Implemented path following and wander behaviours to extend autonomous behaviour
- · Implemented group behaviours for autonomous vehicles

## Lab 8 & 9

• Created bot behaviour that could hide and respond to threats in aggressive or passive ways

#### Lab 10

• Learned the basics of graph search implementation and the differences between search algorithms and how/why they function in the way they do.

#### Lab 11

 Created a bot that utilised rule systems and a world model to develop tactical awareness and formulate a strategy

#### Lab 12

Built upon graph searches to illustrate pathfinding behaviours for bots

#### Lab 13

- Implemented GOAP as an extenstion of GOB behaviour
- Allowing us to create functioning decoupled FSM

## Lab 14

- Created a HSM by layering FSM on top of each other
- Culminated & solidified technique developed in the previous labs