



# A Game for Kings

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AND COMPUTING STUDENTS, PROJECT DESCRIPTION AND  
MARKING SCHEME



# Overview of the Introduction to AI CAs

The Introduction to AI continuous assessments covers all learning outcomes as defined in the Module descriptor:

1. Describe the theory and concepts underpinning Artificial Intelligence.
2. Outline the historical evolution of AI
3. Illustrate the architecture of intelligent agents.
4. Develop the technical and practical skills for developing algorithms used in game playing
5. Demonstrate the use of the structures for knowledge representation and logical reasoning systems.

The CA is divided in two parts with separate submissions as defined in Table 1 below. It can be seen that there are four components that make up the continuous assessment for the module. Both practical Part 1 and 2 have accompanying practical manuals to guide you through the process and should be followed.

Component	Marks allocated	Due Date	In-class Presentations
Document 1: Research and summarise three AI strategies that have been used in developing solutions for Chess, clearly describing the theory and concepts that underpin the AI techniques identified	10%	Friday 28 <sup>th</sup> of September at 5pm	N / A
Practical Part 1	40%	Friday 12 <sup>th</sup> of October at 5pm	Week starting 22 <sup>nd</sup> of October
Document 2: Describe the use of the structures for knowledge representation and your logical reasoning systems	10%	Friday 9 <sup>th</sup> of November at 5pm	N / A
Practical Part 2	40%	Friday 30 <sup>th</sup> of November at 5pm	Week starting 10 <sup>th</sup> of December

*Table 1: Continuous Assessment schedule for the AI module*

Students are **required** to follow the code supplied on Moodle and through the practical manuals. If a student does not follow the supplied code an award of **zero** will be awarded. The submissions for Part 1 and 2 of the projects are examined through a Moodle submission and a mini viva defense by each student of the work submitted as identified in Table 1 above. If a student does not attend the viva defence of their submitted work a mark of **zero** will be awarded.

Practical 1 requires you to create the architecture of the Chess game. A player will win the game if they can successfully capture the opponents King.

Practical 2 is involved with modifying and extending existing structures for knowledge representation to develop your technical and practical skills for developing algorithms used in game playing. To complete this CA you are required to create suitable Intelligent Software Agents and integrate these into your environment.