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|  | | **Finolex Academy of Management and Technology, Ratnagiri** | | | | | | | | | |
| **Department of Information Technology** | | | | | | | | | |
| Subject name: Artificial Intelligence | | | | | | | | Subject Code: BEITC703 | | | |
| Class | | BE IT | | Semester – VII (CBGS) | | | | Academic year: 2019-20 | | | |
| Name of Student | |  | | | | | **QUIZ Score :** | | | | |
| Roll No | |  | | | Assignment/Experiment No. | | | | | 05 | |
| Title:  **To study WUMPUS world problem in artificial intelligence.** | | | | | | | | | | | |
|  | | | | | | | | | | | |
| **1. Course objectives applicable:** COB3 Learn basics of knowledge based agent with help of WUMPUS world environment. | | | | | | | | | | | |
| **2. Course outcomes applicable:**  **CO3** –To study how agent will work in WUMPUS world environment. | | | | | | | | | | | |
| **3. Learning Objectives:**   1. To understand concept of adversarial search. 2. To implement the algorithms and develop the simulation program. 3. To learn first order logic and propositional logic. | | | | | | | | | | | |
| **4. Practical applications of the assignment/experiment:** Used in development of agent programs which work in game playing. | | | | | | | | | | | |
| **5. Prerequisites**:   1. To learn the use of intelligent agent and its type. 2. To understand how agent behaves and performs in WUMPUS world environment. 3. To use FOL in game playing. | | | | | | | | | | | |
| **6. Hardware Requirements**:   1. PC with minimum 2GB RAM   **7. Software Requirements:**  1. Windows installed  2. JDK/Net beans | | | | | | | | | | | |
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| **8. Quiz Questions (if any): (Online Exam will be taken separately batch wise, attach the certificate/ Marks obtained)**   1. What do you mean by WUMPUS world environment? 2. What is the PIT in WUMPUS world environment? 3. What stench indicates in WUMPUS world environment? 4. What glitter indicates in WUMPUS world environment? | | | | | | | | | | | |
|  | | | | | | | | | | | |
| **9. Experiment/Assignment Evaluation:** | | | | | | | | | | | |
| **Sr. No.** | **Parameters** | | | | | | | | **Marks obtained** | | **Out of** |
| **1** | Technical Understanding (Assessment may be done based on Q & A **or** any other relevant method.) Teacher should mention the other method used - | | | | | | | |  | | 6 |
| **2** | Neatness/presentation | | | | | | | |  | | 2 |
| **3** | Punctuality | | | | | | | |  | | 2 |
| **Date of performance (DOP)** | | |  | | | **Total marks obtained** | | |  | | **10** |
| **Date of checking (DOC)** | | |  | | | **Signature of teacher** | | | | | |

**11. Learning Outcomes Achieved**

1. Understood concept of first order logic.
2. Understanding the behavior of different agents in WUMPUS world environment.

**12. Conclusion:**

1. **Applications of the studied technique in industry**
   1. Development of games.
2. **Engineering Relevance** 
   1. Such algorithms are used to solve complex problems where agent have to decide which solution to choose for current state.
3. **Skills Developed**
   1. Study of algorithms used for game playing and first order logic and propositional logic application in game playing.

**13. References** :

[1] G. Görz, C.-R. Rollinger, J. Schneeberger (Hrsg.) “Handbuch der künstlichen

Intelligenz” Oldenbourg Verlag, 2003, Fourth edition

[2] Turing, A. "Computing Machinery and Intelligence", Mind LIX (236): 433–460,

Ocotober, 1950.

[3] Aristotle “On Interpretation”, 350 B.C.E, see:

<http://classics.mit.edu/Aristotle/interpretation.html>

[4] Artificial Intelligence: A modern approach, Stuart Russel and Peter Norvig, Pearson.

[5] Artificial Intelligence, Elaine Rich and Kevin Knight, Tata McGraw.

[6] Principles of Artificial Intelligence, Nils J. Nilson, Narosa Publications.