Prolog Assignment

Proloǵ s Project – 30%

Individual assignment

Delivery date

October 31, 2025, until 23H59 via website – http://aka.ms/madasi-nova-ai-homework.

Description

The students need to build in Prolog a reasoning system capable of extracting information from a base of facts concerning Europe, its countries, citizens, and culture.

Part 1

The **factual base** shall contain information on the following rules:

1. Define the relationship between countries, capitals and major cities
2. Define border relations
3. Define membership in the European Community
4. Define countries' currencies
5. Define how countries belong to regions (e.g. Scandinavian, Balkan, etc.)
6. Define type of political system (parliamentary democracy, presidential, monarchy)
7. Define countries' main icons & traditions
8. Define the main tourist places of the country
9. Define countries' main cultural fingerprints
10. Other relevant facts about countries' uniqueness and their contribution to Europe

(**be creative)**

Part 2

Create **rules** that allow use the factual base to create relevant knowledge about Europe.
Examples:

- Who are the countries with common languages?
- Who are the countries that have a border with country X?
- What is the best thing to do and visit in country Y or region Z?
- ….
- **(be creative)**

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Part 4

Write a full report analysing the relationships, tree diagrams and code.

Tools

- VS Code
- https://swish.swi-prolog.org/
- ….

Late Delivery

Late deliveries will have a 1 value deduction for each 8h delay in the first day, and 2 values for each 8h delay in the following days until all 20 values are deducted.

Exemple:

- 9h delay will mean – 2x8h delay blocks -> -2 values
- 26h delay will mean – 3x8h delay blocks of day 1 + 1x8h block in day 2 -> -5 values

Deliverables

- Prolog file or txt with your code.
- Relationships and tree diagrams.
- Report (PDF).
- Put them all together in a zip file.
- Submit final project on the website – http://aka.ms/madasi-nova-ai-homework