

TUTORIAL 3

- **Problem solving exercises**
- **Writing a Project Proposal**

Problem solving exercises

1. The Father's Son Riddle

Brothers and sisters I have none but this man's father is my father's son.

Who is the man?

2. The Mystery of Use Without Need

Who makes it, has no need of it.

Who buys it, has no use for it.

Who uses it can neither see nor feel it.

What is it?

3. The Light Bulb Switch Puzzle

There are three switches downstairs. Each corresponds to one of the three light bulbs in the attic.

You can turn the switches on and off and leave them in any position.

How would you identify which switch corresponds to which light bulb, if you are only allowed one trip upstairs?

Writing a Project Proposal (P1)

Scenario:

You have been hired by a bookstore chain to create a web app aimed at increasing online sales. The app should include features such as book browsing, personalized recommendations, online purchasing and a reward system. Inventory management integration is not included.

Note:

Student work in a small group (3-4 members)

Writing a Project Proposal (P2)

Task:

Prepare a concise Project Proposal with the following sections:

1) Project Client and Team:

- Team member roles (e.g., project manager, developers, testers)

2) Project Description:

- Background and objectives clearly defined

3) Scope:

- List clearly what is included (and excluded)

Writing a Project Proposal (P3)

Task:

Prepare a concise Project Proposal with the following sections:

4) Schedule:

- Define start/end dates
- Allocate resources (team, technology)
- Provide a basic Gantt Chart illustrating the timeline

5) Risks:

- Identify three potential risks, categorize them (technology, financial, schedule, stakeholder)
- Include a Risk/Impact Matrix
- Outline a mitigation strategy for each identified risk