Exercise 10

Task 1:

> Excel File : Tetris AR Game

Task 2: Estimate the costs of this project and explain your rationale.

Based on my calculations, the **estimated total project cost is 370,000 €**, including development, marketing, and operational costs.

Rationale:

- I chose a lean team: 4 developers, 1 UI/UX designer, 1 QA tester, and 1 project manager (part-time), which is enough to cover all tasks without overstaffing.
- I planned a short development time of 3–4 months, which reduces salary expenses.
- Equipment costs are limited to AR glasses and essential licenses (10,000 €).
- Marketing costs are set to 50,000 €, sufficient for targeted AR gaming audiences without overspending.
- Operational costs (60,000 €) cover servers, maintenance, and updates for the first 6 months after launch.

Price:

I would sell the software for 10 € per download targeting at least 50,000 downloads **t**o break even and start making profit.

Why? Because 10 € is affordable for casual gamers, competitive with similar AR mobile games, and high enough to reflect the premium AR experience.

Task 3: How would you staff the project to achieve minimal time to market?

To move fast, I'd assemble **a** compact, cross-functional team:

- 4 Developers: Experienced in Unity/Unreal + AR frameworks (ARKit, ARCore).
- 1 UI/UX Designer: Specialized in AR interfaces.
- 1 QA Tester: Starts during development to catch issues early.
- **0.5 Project Manager**: Ensures coordination and timelines. This team covers all key skills while keeping communication simple and avoiding overhead, enabling rapid progress with short feedback loops.

Task 4: Which software development process would you use? Explain why.

I would use an **Agile process**, specifically **Scrum**:

- Sprints of 2 weeks keep progress visible and allow frequent reviews.
- Tasks like prototype, core engine, AR features, and UI can be incrementally implemented.
- User feedback from early builds can quickly be incorporated in the next sprint.
- Agile's flexibility helps adapt priorities if unexpected AR or performance issues appear.

This iterative approach is ideal for AR, where testing on real devices often reveals new challenges.

Task 5: Your project is already over time and over budget. Describe 5 options to finish the project.

- 1. **Reduce scope** Cut or postpone non-essential features (e.g., cosmetic skins, extra levels) to focus on core gameplay.
- 2. **Extend budget** Seek additional funding from investors or partners to finish key features without sacrificing quality.
- 3. **Increase team productivity** Reassign tasks to most efficient team members; remove bottlenecks; work in parallel where possible.
- 4. **Outsource remaining tasks** Hire freelancers/agencies for parts like sound design or graphics to speed up delivery.
- 5.**Negotiate new timeline** Talk with stakeholders about adjusting deadlines to deliver a stable, quality product rather than rushing an incomplete version.