Workshop: Risk Management and Planning

Risk is a combination of the likelihood of an adverse event and the severity of the potential consequences [Leveson]. Identifying risks and drawing up plans to minimise their effect on the project is called risk management [Sommerville, Hall, Ould]. In software projects a risk is an event that may threaten the project schedule or resources, the quality or performance of the software that is being developed or the organisation developing or procuring the software.

The objective of this class is to practice the identification, prioritising, monitoring and mitigation of risks and to identify some of the problems which arise in doing this.

1. Read the case study below and make a list of significant risks that could prevent you from achieving the goal of developing a VR tennis game with ST. What could go wrong? Also identify any positive risks (opportunities).

2. For each risk identified in step 1, identify factors which could lead to that event occurring.

3. What is the likelihood of each such factor (likely or unlikely)?

4. What is the severity of each factor (high impact, low impact)?

5. You can now prioritise your list, starting with high impact, high likelihood events, down to low impact, unlikely events. Consider how, during the project, you would monitor (and avoid) the looming occurrence of the events you have identified. Concentrate on the highest priority risks.

6. Decide how to mitigate critical events should they occur, suggesting a contingency plan for disaster recovery from each.

7. Finally, once you have identified and prioritised risks and decided how to monitor and mitigate them, your risk management plan needs to be communicated to all concerned. Who are those concerned? How would you communicate your plan?

Risk Management Case Study

Congratulations, you just got a job working for Smith Technologies (ST) specifically on a virtual reality tennis game software project funded by the client Mr Ironfist. Mr Ironfist has a reputation for changing his mind and knowing exactly what he does not want whilst not being able to explain what he wants.

The market is currently very competitive for virtual reality software projects with a lot of similar projects being undertaken by ST’s competitors.

Some of the work is being outsourced to Leo Inc. (Leo), a small boutique firm. Leo have very little experience with this type of project and have a vastly different approach to ST.