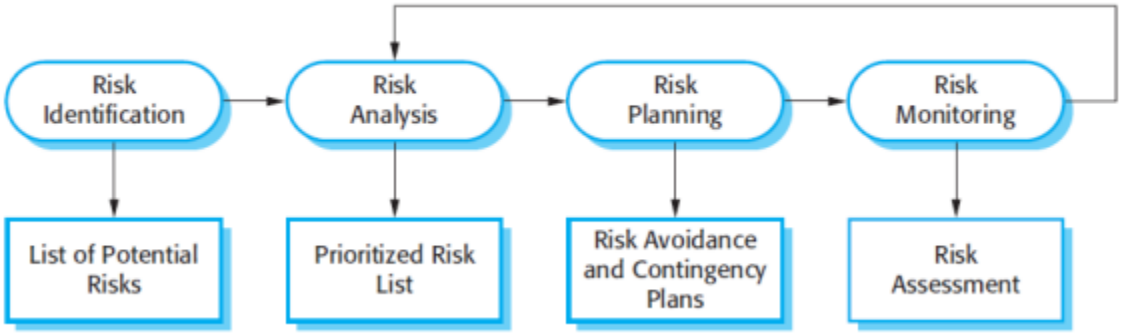
ICES4HU
Risk Management Report

1 Introduction

Instructor and Course Evaluation System for Hacettepe University" (ICES4HU) is a web-based system designed to streamline the process of evaluating courses and instructors in Hacettepe University. The system aims to improve the quality of education by providing students with an easy-to-use interface for evaluating courses and instructors, and enabling related people to analyze the collected data. However, like any software project, ICES4HU also carries risks that need to be managed to ensure project success. Risks are events or conditions that could impact the project's objectives or deliverables, and effective risk management is crucial in project planning to proactively identify, assess, and mitigate potential risks. This risk management report aims to identify and assess potential risks associated with ICES4HU and propose strategies to manage and mitigate these risks throughout the project lifecycle, ensuring the smooth implementation of the system at Hacettepe University.

Risks can arise from various sources and can have different impacts on the project, such as schedule delays, cost overruns, quality issues, or stakeholder dissatisfaction. Effective risk management is essential in project planning to proactively address potential risks and minimize their impact on project success. By identifying and assessing risks early in the project, the project team can develop appropriate mitigation strategies and ensure that the project is delivered on time, within budget, and with the desired quality.

The objective of this risk management report is to identify and assess potential risks associated with ICES4HU and propose strategies to manage and mitigate these risks throughout the project lifecycle. The report will provide an overview of the identified risks, their likelihood and impact, and proposed mitigation strategies. By proactively managing risks, the project team can minimize the impact of risks on the project's success.



Risk identification is important to achieve a list of potential risks that might occur throughout the project. After obtaining the list risks should be analyzed one by one to have a view of crucial risks and less important. Not every risk is catastrophic for the project. Risk analysis helps us see the important ones. Furthermore we need risk planning to find out ways to prevent or minimize the effects of risks. After all these steps we can monitor what are consequences of the risks and our mitigation strategies.

2 Description

The description section of the risk management report gives an overview of the project's potential risks and outlines the strategies to be implemented to mitigate them. It is important to manage these risks to avoid problems that could affect the project's success. The risks are presented in a prioritized order of importance,

with the most significant risks listed first, and decreasing in importance as the list progresses.

1. Data can be lost or corrupted, making it difficult to use.

   Strategy to be implemented: Implement strong data backup and recovery processes to protect data.

2. Improper understanding of project requirements can lead to negative impacts.

   Strategy to be implemented: Gather requirements, assess them, involve stakeholders, then confirm with testing and prototyping.

3. Failure to communicate the stakeholders

   Strategy to be implemented: Establish clear communication guidelines for frequency, format, and regular updates to stakeholders.

4. Overestimating a group member's labor. Thus, giving him more tasks then s/he can perform

   Strategy to be implemented: Clarify expectations, provide training and feedback, and, if necessary, replace team members who aren't performing above the standard.

5. The chosen framework or database is inappropriate.

   Strategy to be implemented: Before committing to a framework or database, do the research, consult, and test.

6. Negative user experience can lead to decreased adoption, satisfaction, and reputational damage.

   Strategy to be implemented: Establish procedures to find and fix problems and issues, conduct extensive testing, and include users.

7. Personal information can be accessed or shared without consent.

   Strategy to be implemented: Implement security measures and comply with privacy laws.

8. Project failed to meet deadlines.

   Strategy to be implemented: Establish precise deadlines and checkpoints, measure progress with project management tools, and provide frequent updates.

9. Team members might not be on the same page as their teammates or their tasks.

   Strategy to be implemented: Promote communication, define roles, monitor progress, and make use of tools to spot problems early.

10. Using unsuitable tools can lead to decreased productivity, costs, and quality.

    Strategy to be implemented: Identify needs, perform research, consult, and select the finest tools for the job.

11. Inadequate maintenance might result in out-of-date equipment and security flaws

    Strategy to be implemented: Developing and implementing a maintenance plan for web application updates.

12. Users may submit incorrect evaluations, leading to inaccurate data.

    Strategy to be implemented: Create user-friendly user interfaces, provide clear feedback and instructions, check for errors, and put safety measures in place.

13. The platform may be susceptible to hacking attacks, data breaches, and unauthorized access due to weak security measures.

    Strategy to be implemented: Implement strong security measures such as encryption, authentication, access controls, and regular security audits.

14. The platform may rely on third-party tools or systems that do not integrate seamlessly, causing technical issues and delays in the project.

    Strategy to be implemented: Test third-party tools and systems thoroughly, identify potential integration issues early on, and have contingency plans in place.

15. The project may face resource constraints, such as limited budget, time, or employee that hinder project progress or quality.

    Strategy to be implemented: Prioritize project goals and requirements, optimize resource allocation, and communicate resource constraints and trade-offs to all stakeholders.

3 Risk Management Report Specifications

In this section we will see the "Risks Forecasted in Planning" and "Risks not Forecasted in Planning but observed". The critical risks that might occur and the mitigation strategies are listed below in "Risk Forecasted in Planning". In "Risk not Forecasted but observed" part risk that are not planned but encountered are listed.

Risks Forecasted in Planning	How it was handled/mitigated
1. Improper understanding of project requirements can lead to negative impacts.	Requirements must be gathered carefully. There should be continuous communication with the stakeholders in order to understand the needs. Confirmation with testing and prototyping is important.
2. Negative user experience can lead to decreased adoption, satisfaction, and reputational damage.	Establish procedures to find and fix problems and issues, conduct extensive testing, and include users.
3. Failure to communicate the stakeholders	Establish clear communication guidelines for frequency, format, and regular updates to stakeholders. Continuous communication is important to gather the correct final product.
4. Users may submit incorrect evaluations, leading to inaccurate data.	Create user-friendly user interfaces, provide clear feedback and instructions, check for errors, and put safety measures in place.
5. Personal information can be accessed or shared without consent.	Implement security measures and comply with privacy laws.
6. Inadequate maintenance might result in out-of-date equipment and security flaws	Developing and implementing a maintenance plan for web application updates.
7. The platform may be susceptible to hacking attacks, data breaches, and unauthorized access due to weak security measures.	Implement strong security measures such as encryption, authentication, access controls, and regular security audits.
8. The platform may rely on third-party tools or systems that do not integrate	Test third-party tools and systems thoroughly, identify potential integration issues early on, and

seamlessly, causing technical issues and delays in the project.	have contingency plans in place.
9. The project may face resource constraints, such as limited budget, time, or employee that hinder project progress or quality.	Prioritize project goals and requirements, optimize resource allocation, and communicate resource constraints and trade-offs to all stakeholders.
Risk not forecasted in planning but observed	How it was handled/mitigated
1. Demo timing	Extension wanted from stakeholders and new timeline created with teammates. Development speed increased.
2. Task separation according to availability of teammates	Communication between teammates increased. New meetings planned.

Risk List Document Information:

Risk Types:

People - **P**

Requirements - **R**

Estimation - **E**

Technology - **Te**

Tools - **To**

Organizational - **O**

Impacts:

5 - HIGHEST IMPACT (Catastrophic)

4 - Serious

3 - Moderate

2 - Tolerable

1 - LOWEST IMPACT (Insignificant)

Probabilities:

0-30% -> Unlikely

30-60% -> Moderately

60-100%-> Highly Likely

Owner:

Software Project Manager: Deniz Erkin Kasaplı

Software Configuration Manager: Gizem Aleyna Tuzcu

Software Analyst:Berkay Barulay

Software Architect: Ahmet Karaca

Software Tester: Hasan Malkoç

Magnitude: Multiplication of impact and probability

Mitigation Strategy: A plan or set of actions to reduce or eliminate the negative impact of the risk.