Studienarbeit
Documentation

Studienarbeit: Reverse Engineering

Semester: Autumn 2022

Version: 1.0
Date: 2022-10-12

Project Team: Gianluca Nenz
Ronny Mueller
Thomas Kleb

Project Advisor: Ivan Buetler

School of Computer Science
OST Eastern Switzerland University of Applied Sciences

Contents

Chapter 1

Project Idea

Chapter 2

Risks

2.1 Risk Managment

For this project, the "Project Management Triangle" is lacking the cost dimension, while the time dimension is fixed (strict deadlines). As a result, any risks that appear, automatically lead to a reduction of the project scope if there is no spare time. Because of this, we will prioritize dealing with risks above regular tasks and prioritize essential tasks over nice-to-haves, but we do not intend on planning in a flat time margin as we have no way to negotiate for more time.

2.2 Estimated Risks

General Risks

- Finding Testing Participants (severity: medium, probability: high)
  Mitigations: Early looking for backup person
  Actions taken: Found backup person
  New probability: low

- Being able to create reverseable Programs with additional difficulties. (severity: very high, probability: medium)
  Mitigations: being able to ask Ivan
  Actions taken: Asked for possible help
  New probability: low

- Irreparable corruption of git server. (severity: very high, probability: low)
  Mitigations: Weekly off-site git server backups
  Actions taken: Repository mirrored to GitHub
  New severity: low

- Irreparable corruption of git server. (severity: very high, probability: low)
  Mitigations: Weekly off-site git server backups
  Actions taken: Repository mirrored to GitHub
  New severity: low

- Lost work due to un-pushed work. (severity: low, probability: high)
  Mitigations: Frequent reminders to push changes by Scrum Master / Team

License Complications

- License Problems with Ghidra. (severity: high, probability: very low)
  Mitigations: No mitigations needed because it's completely Open Source.

- License Problems with IDA. (severity: high, probability: low)
  Mitigations: Providing a previously free version

Chapter 3

Testing

3.1 Procedure

To be sure that our defined Labs have a high value to future students we wanted to define some Students who solve the Lab and give Feedback to us about their experiences. To have some sort of comparable Feedback we created a Google Forms which contains many Questions about their experiences completing our lab and what they think about it. After getting their Feedback we are going to tweak our Labs with their opinions in mind.

3.2 Test Subjects

Our Test Subjects are like us in their 5th Semester at the Ost in Rapperswil-Jona. They also study Computer Science.

3.3 Feedback

The feedback we got was the following:

3.4 Impact

Based on the Feedback in the last chapter we decided to tweak some Labs to better suit a beginner. The changes we made will be described in detail in the following Chapters.

Chapter 4

Meetings

4.1 06-10-22

Lorem Ipsum