Research Plan

HeardIT

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1. Introduction

The purpose of this document is to outline the planning for the research that I am going to undertake during the development of the HeardIT application. In this document I will outline the main research question and the sub-questions that will follow from the main question. These sub-questions will be used to split the main question into smaller topics so that I can focus on the different aspects individually. Finding the answer to each sub-question will allow me to create a comprehensive answer for the main question in the end of my research.

This research will take a significant amount of time during the duration of the assignment. This means that this research document will be only the planning stage for the research. Changes may occur during the research process. Specific research reports will be created where I will present the answers to each question in detail.

1. Main question

In this section the main question will be established. In order to complete the research, the main question needs to have a concrete answer. For this reason, it is important to define the main question well. The main question will also allow us to create the sub-questions that will help us answer the main question.

The main research question is:

*How can the HeardIT application be developed in alignment with the modern standards for software applications?*

Answering this question will allow us to definitively prove that HeardIT is an application that meets the modern demands and standards for software applications. To answer this question, sub-questions that focus on specific aspects from the main question are established. Finding the answer to those will allow me to conclude a definitive answer for the main question. In the next section, I will establish the sub-questions and the DOT research methods that I am going to use in order to answer them.

1. Sub-questions
2. What is the most suitable architecture type for the HeardIT web-application?

Methods used: Literature study, Expert interview, Design pattern research, Document analysis, Brainstorm, Problem analysis

1. What technologies are most suitable for *developing* HeardIT?

Methods used: Literature study, Expert interview, Document analysis, Problem analysis, Pitch

1. What technologies are most suitable for *deploying* HeardIT?

Methods used: Literature study, Expert interview, Available product analysis, Prototyping, Problem analysis, System test

1. How can I test to ensure that HeardIT meets the standards of modern applications?

Methods used: Literature study, Problem analysis, System test, Component Test, Expert Interview, Non-functional test, Security test

1. Conclusion

To conclude this research plan, the main question and the sub-questions that were derived from the main question are established. The main DOT research methods that are going to be used during the research for each of them are also determined. The next step is to start actually researching these topics. This will be documented in detail in separate reports where I will focus on each of these questions and conduct the research on each topic. These documents will be linked in this document when they are created.