CCT College Dublin

Assessment Cover Page

To be provided separately as a word doc for students to include with every submission

Module Title:	Guide Project
Assessment Title:	Draft Chapter 1
Lecturer Name:	Aldana Louzán Grandi and Ken Hearly
Student Full Name:	Marliclere Alves Pereira dos Santos
Student Number:	2022057
Assessment Due Date:	Sunday 18th June 2023 - 23:59 (11:59 pm)
Date of Submission:	Thursday 15th June 2023 00:19 (00:19 am)

Declaration

By submitting this assessment, I confirm that I have read the CCT policy on Academic Misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source. I declare it to be my own work and that all material from third parties has been appropriately referenced. I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution.

CCT College Dublin

Final Project – Draft Chapter 1
ISAT – Interview Scheduling and Audio Transcription

Report version 1.3

Table of Contents

i.   List of Figures

Document Introductions

This document was created in response to exercises from " Home /My courses /GuideTechProj_HDipComp_Sept22 /12 June - 18 June /Draft Chapter 1 submission" inside the CCT College Dublin Moodle page. (CCT College Dublin, n.d.)

# I.	Chapter 1 - Introduction

## 1.	Understanding the demand

For who is this demand?

NUDHES is a Brazilian health study group working with subjects related to LGBT+ human rights.

The "research group (NUDHES) was created in 2014, based on the experience with the LGBT community of researchers, healthcare providers, and social assistance workers."(https://www.nudhes.com/, n.d.)

More information about the research group: https://en.nudhes.com/sobre

Is important to inform that the NUDHES projects are regulated by Brazilian ethical rules.

What is the demand?

Some NUDHES Projects need to manage information from the Interviewer's contact, interviewed participants, and interview scheduling, until the interview transcript document report and data analyses.

Nowadays, the document with the interview content is created manually by the interviewer, transferring the audio content of the conversation into a written report.

The proposal is to create one website to manage the interview process and also make it possible to generate automatically the audio content into a written report. After the audio text report generation, the interviewer will verify it and makes the corrections needed.

I proposed the ISAT - Interview Scheduling and Audio Transcription website to attend the demand above described. The website creation will attend to the needs.

One desirable functionality asked for is a way to display the interview appointments by date from the mobile phone device. Other ISAT parts will keep with the Desktop resolution, but the Management of Calendar needs both desktop and also mobile resolution.

2. Describing the ISAT's main functionalities

The ISAT - Interview Scheduling and Audio Transcription will have two Modules: Administrative and Interview

2.1.1. Administrative Module's main functionalities

Inside the Administrative Module will have Users Type, Users Management, Report of Users, and Home.

The Users Type functionality is where the Type of Users are created, examples of the type of users: are administrative, interviewer, or researcher

The User's Management is the functionality responsible for controlling users and their access. The users (interviewer or researcher) could be created by themselves in the logoff area, but the administrator must approve its creation realizing the activation process.

The Report of Users is the functionality responsible for making available the users' reports.

Only Administrative users can access the Administrative Module.

Each functionality will be described in detail in the chapter about Functional Requirements and Restrictions.

[Administrative Module]

Home

Users Type

Users Management

Report of Users

2.1.2. Interview Module's main functionalities

Inside the Interview Module, will have Management of Interviewees, Interview Scheduling – Appointments, Management of Calendar – Appointments, Management of Audio, Audio Transcription, and Home

The Management of Interviewees is the functionality where the Interviewer adds and edits the interviewee's information.

The Interview Scheduling is where the Interviewer adds and edits the Interview Appointments.

The Management of Calendar is the functionality where the Interviewer sees the appointments by date, gets the report, and also can ask for the interview confirmation by email.

The Management of Audio is the functionality where the Interviewer can upload the audio file.

The Audio Transcription is the functionality where the Interviewer can get the transcription of the audio interview to text.

Each functionality from the Interviewer Module will be described in detail in the chapter about Functional Requirements and Restrictions.

[Interviewer Module]

Home

Management of Interviewees

Interview Scheduling – Appointments

Management of Calendar – Appointment

Management of Audio

Audio Transcription

3.   Why ISAT is a good project?

The ISAT - Interview Scheduling and Audio Transcription is a good project because it will allow the management of Interviews (appointments and participants) and also generate automatically the audio interview transcription in a safe and fluid way according to the NUDHES health research group premises. The ISAT will be developed by taking the participants' information as private data from the first and last names to the social names.

With the ISAT - Interview Scheduling and Audio Transcription website the NUDHES health research group will have access to all information about the interview, from the organization of the interview to its audio file and including its report transcription.

Utilizing the ISAT - Interview Scheduling and Audio Transcription, the Interviewers from the NUDHES health research group will have a normalized way to organize the interview information since the appointment, appointment confirmation and audio recording bring organization to this phase before the written report.

3.1. Personal Challenges

I would like to overcome during the development of ISAT - Interview Scheduling and Audio Transcription the challenge below:

I do not know .NET MAUI (© Microsoft 2023, 2023a) and I do not have experience with this cross-platform framework. I would like to create the website utilizing the .NET Multi-platform App UI (.Net MAUI) technology and try to solve the desirable functionality related to making available the Management of Calendar from a mobile device. Utilizing .Net MAUI is possible to solve this desirable functionality and run the application on Android or IOS.

This desirable functionality could be implemented by creating a responsive mobile layout, but I decided to learn .NET MAUI and create the entire website utilizing this technology. My goal is to create the complete website, and make available this small part about the Management of Calendar to Android devices.

I want to increase my skills and work with .NET Multi-platform App UI (.Net MAUI) using C# language (already know it) and put into practice the write-once run-anywhere concepts adding more value to my curriculum-related .NET by this new technology.

I am learning how to manage a project utilizing Git Hub Project. I decided to utilize it because it is a good way to organize the code repository and also tasks/issues integrating both

aspects. I would like to present this git project and its repository as my portfolio to increase my chances about to get a job.

At the end of this project, I also would like to host the website in a Cloud Environment and increase my skills in it, at this point, I also do not have professional experience with it.

4.   Technologies

4.1. Programming Language, Framework, and Design Pattern

I choose the oriented-programming language C# (© Microsoft 2023, 2023b) and I am going to utilize the .Net framework (© Microsoft 2023, n.d.-c) technology to create the website application from the project .NET Multi-platform App UI (.Net MAUI) (© Microsoft 2023, 2023b) which is a cross-platform framework that makes possible to write-once and run-anywhere.

Is important to note that run-anywhere nowadays means to run on "Android, iOS, macOS, and Windows from a single shared code-base" (© Microsoft 2023, 2023a) according to Microsoft.
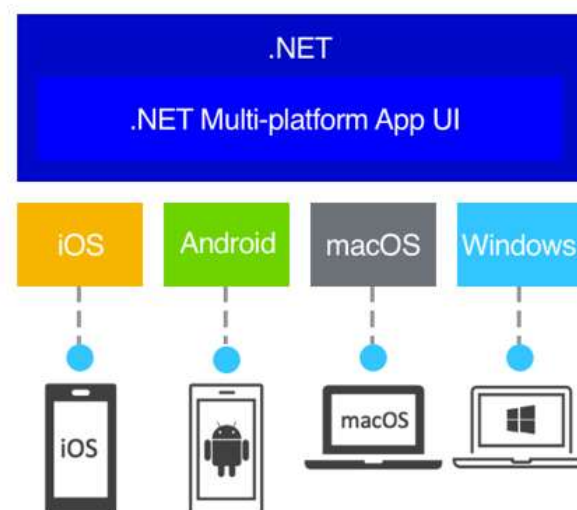

Figure 1: (© Microsoft 2023, n.d.-a) **.NET Multi-platform App UI (.NET MAUI)**

The design pattern will be the Model-View View Model (© Microsoft 2023, 2022) developed by Microsoft.

4.2. Database option and ORM

The Entity Framework (EF) Core will be utilized as an ORM (Object Relational Mapper) (© Microsoft 2023, 2021).

At this point, I did not decide yet about the database server, but I am going to utilize a relational database. I am inclined to utilize the Microsoft SQL SERVER(© Microsoft 2023, n.d.-b), but due to the higher costs to maintain it in the Cloud environment, I am starting to think about utilizing MySQL (© 2023 Oracle, n.d.) which is also a relational database but it is an Open-Source (Kavanagh, 2004) and has advantage related costs.

4.3. Cloud Environment option

I would like to utilize a Cloud Environment to run the ISAT - Interview Scheduling and Audio Transcription. I am going to organize a meeting about costs and decide about one of the big players Amazon, Microsoft, or Google, although the last one I do not have training to work with.

References and Citations

© 2023 Oracle. (n.d.). *What Is MySQL? | Oracle*. Retrieved June 14, 2023, from
   https://www.oracle.com/mysql/what-is-mysql/

© Microsoft 2023. (n.d.-a). *maui-overview.png (imagem PNG, 435 × 387 pixels)*. Retrieved
   June 14, 2023, from https://learn.microsoft.com/en-us/dotnet/maui/media/what-is-
   maui/maui-overview.png

© Microsoft 2023. (n.d.-b). *SQL Server Downloads | Microsoft*. Retrieved June 14, 2023, from
   https://www.microsoft.com/en-us/sql-server/sql-server-downloads

© Microsoft 2023. (n.d.-c). *What is .NET Framework? A software development framework.*
   Retrieved June 14, 2023, from https://dotnet.microsoft.com/en-us/learn/dotnet/what-
   is-dotnet-framework

© Microsoft 2023. (2021, May 25). *Overview of Entity Framework Core - EF Core | Microsoft
   Learn*. https://learn.microsoft.com/en-us/ef/core/

© Microsoft 2023. (2022, April 11). *Model-View-ViewModel | Microsoft Learn*.
   https://learn.microsoft.com/en-us/dotnet/architecture/maui/mvvm

© Microsoft 2023. (2023a, January 30). *What is .NET MAUI? - .NET MAUI | Microsoft Learn*.
   https://learn.microsoft.com/en-us/dotnet/maui/what-is-maui

© Microsoft 2023. (2023b, April 5). *A tour of C# - Overview | Microsoft Learn*.
   https://learn.microsoft.com/en-us/dotnet/csharp/tour-of-csharp/

CCT College Dublin. (n.d.). *CCT College Dublin: Log in to the site*. Retrieved March 4, 2023,
   from https://moodle.cct.ie/login/index.php

https://www.nudhes.com/. (n.d.). *NUDHES | Sobre*. Retrieved June 4, 2023, from
   https://en.nudhes.com/sobre

Kavanagh, P. (2004). The Open Source Definition. In *Open Source Software* (pp. 321–322).
   Elsevier. https://doi.org/10.1016/B978-155558320-0/50016-7