INITIAL PLAN
FOR
ONLINE ORDERING SYSTEM

Prepared By

DIGII

İREM YUVALI

İREM BOLAT

DUYGU ADA DİVLE

GİZEM ERDOĞAN

IVAN KUZNETSOV

November, 2021

CHANGE HISTORY

This document is the first version of *ONLINE ORDERING SYSTEM*, Initial Plan that was released on November, 2021. The subsequent changes will be mentioned in this part of the Initial Plan.

PREFACE

The document contains the Initial Plan of *ONLINE ORDERING SYSTEM*. The mission of the project is to develop a web-based ordering system for CEN421-System Analysis and Design Course given by Havva Esin Ünal.

The goal of the initial plan is to describe overall picture of the *ONLINE ORDERING SYSTEM*. This system is prepared according to IEEE standard **[1]**. The initial plan is in content compliance with the IEEE standard 1058-1998 in which the contents of this standard are rearranged and a mapping is provided. That is, the content compliant initial plan is mapped into various clauses and subclauses of the IEEE standard 1058-1998.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. OVERVIEW

1.1 Project Summary

1.1.1 Purpose, Scope and Objectives

Online Ordering System is a website designed primarily for use in the food delivery industry. Through these services, restaurants can sell and distribute their food/meal at minimal resource usage effectively with high profits by gaining the customer's trust.

We want to solve this problem by using an online ordering system for restaurants. This will provide users to offer meals from restaurants in two ways:

• in restaurant

• to your home

The first issue our application will solve is stop spreading of coronavirus because when you are talking to waiter it's unsafe some of them not use masks and other personal care. Some people also don't want to interact with someone because some waiters are not kind. The second issue are project will solve is saving time for people because when they will order food for the application into 15 minutes of their time.

The objectives of the Online Ordering System are;

- Saving time for both the customer and the restaurant,
- Eliminating communication difficulties in a way that appeals to everyone,
- Keeping the level of hygiene and cleanliness high.

The scope of the Online Ordering System

- Customers can make their payments at the website and not with the waiter or waitress who took the order.
- The proposed system is customized for restaurants in the processing and management of the menu order system by accessing the website, and the payment section on the website is customized for the use of customers.

1.1.2 Assumptions and Constraints

The assumptions of the project are;

- The team DIGII consists of 5 (five) people that work on this Online Ordering System Project.
- The correspondence of the documentation produced to the IEEE Standards **[1, 2, 3, 4]** is subcontracted by team Dream Squad.

The constraints of the project are;

- The schedule of the project is predefined by the Supervisor.
- There is no budget and investor. For hardware and software needs existing resources of DIGII will be used.
- Since the project is being developed as part of the undergraduate course CEN421-System Analysis and Design, there will be no payment to DIGII.
- Since it is possible to have users from all over the world, the ONLINE ORDERING SYSTEM will be a web-based platform independent.
- The software development processes and any kind of documentation will be in compliance with the IEEE Standards **[1, 2, 3, 4]**.

1.1.3 Project Deliverables

- ***Problem Statement Report & Presentation:*** The problem statement report of the project was prepared and submitted to DIGII Team in Microsoft Teams until October 25th, 2021. Besides, required explanations were given to the supervisor about the project.
- ***Initial Plan Delivery:*** The document will be prepared and submitted to DIGII Team in Microsoft Teams until November 1st, 2021.

- ***Initial Plan Review Report:*** The subcontractors will review the Initial Plan until November 5th, 2021. Then Initial Plan Review Report will be prepared by the subcontractors and will be sent to Microsoft Teams. Also, DIGII will review the initial plan of the subcontractors until November 5th, 2021 and will be sent to Microsoft Teams.

- ***SRS Delivery:*** The document will be prepared and submitted to DIGII Team in Microsoft Teams until November 15th, 2021.

- ***SRS Review Report:*** The subcontractors will review SRS until November 19th, 2021. Then SRS Review Report will be prepared by the subcontractors and will be sent to Microsoft Teams. Also, DIGII will review the SRS of the subcontractors until November 19th, 2021 and will be sent to Microsoft Teams.

- ***SPMP Delivery:*** The document will be prepared and submitted to DIGII Team in Microsoft Teams until December 6th, 2021.

- ***SPMP Review Report:*** The subcontractors will review SPMP until December 10th, 2021. Then SPMP Review Report will be prepared by the subcontractors and will be sent to Microsoft Teams. Also, DIGII will review the SPMP of the subcontractors until November 10th, 2021 and will be sent to Microsoft Teams.

- ***SDD Delivery:*** The document will be prepared and submitted to DIGII Team in Microsoft Teams until December 20th, 2021.

- ***SDD Review Report:*** The subcontractors will review SDD until December 24th, 2021. Then SDD Review Report will be prepared by the subcontractors and will be sent Microsoft Teams. Also, DIGII will review the SDD of the subcontractors until November 24th, 2021 and will be sent to Microsoft Teams.

- ***Delivery of Updated Reports:*** The updated reports will be delivered on December 31st, 2021.

- ***Project Presentation:*** The project will be presented January 3rd, 2022.

1.1.4 Schedule and Budget Summary

Deadline of the project is given in the following table.

Due Date	Document/Activity Name
25.10.2021	Problem Statement Report &Presentation
01.11.2021	Initial Plan Delivery
05.11.2021	Initial Plan Review Report
15.11.2021	SRS Delivery
19.11.2021	SRS Review Report
06.12.2021	SPMP Delivery
10.12.2021	SPMP Review Report
20.12.2021	SDD Delivery
24.12.2021	SDD Review Report
31.12.2021	Delivery of Updated Reports
03.01.2022	Project Presentation

Table 1: Deadline of the Project

No budget is associated with ONLINE ORDERING SYSTEM. For hardware and software needs existing resources of DIGII will be used.

1.2 Evolution of the SPMP

This is the first version of the Initial Plan where subsequence changes will be mentioned in this part of the Updated Initial Plan. The table below shows the updates which are planned to be done to the Initial Plan. **[Table 2]**

Due Date	Document / Review Type
01.11.2021	Initial Plan Delivery
05.11.2021	Initial Plan Review Report

Table 2: Update Plan of the Initial Plan

2. REFERENCES

[1] IEEE Std 1058-1998, IEEE Standard for Software Management Plans.

[2] IEEE Std 830-1998. IEEE Recommended Practice for Software Requirements Specifications

[3] IEEE Std 1016-1998, IEEE Recommended Practice for Software Design Descriptions

[4] IEEE Std 1063-1998, IEEE Standard for Software User Documentation

[5] Project Management Organizational Structures: **link**

[6] Essential Guide to Project Organizational Structure: **link**

3. DEFINITIONS

Administrators: Developers of the project. (Members of DIGII)

Customers: The people who order.

Deliverers: Meal deliverers like waiters or motorcycle courier.

DIGII: Software development and project team of ONLINE ORDERING SYSTEM.

Dream Squad: Subcontractor of DIGII.

IEEE: Institute of Electrics & Electronics Engineering.

Restaurants: Places that receive the orders.

SDD: Software Design Description

SPMP: Software Project Management Plan

SRS: Software Requirements Specification.

Subcontractor: Another project team, which carry out the quality assurance of the project.

Supervisor: The instructor of the CEN421 - System Analysis and Design lecture (named Havva Esin Ünal)

Team DIGII: The team in Microsoft Teams that is created by the supervisor.

4. PROJECT ORGANIZATION

4.1 External Interfaces

The external interfaces of the ONLINE ORDERING SYSTEM are given in the Figure 1 below.

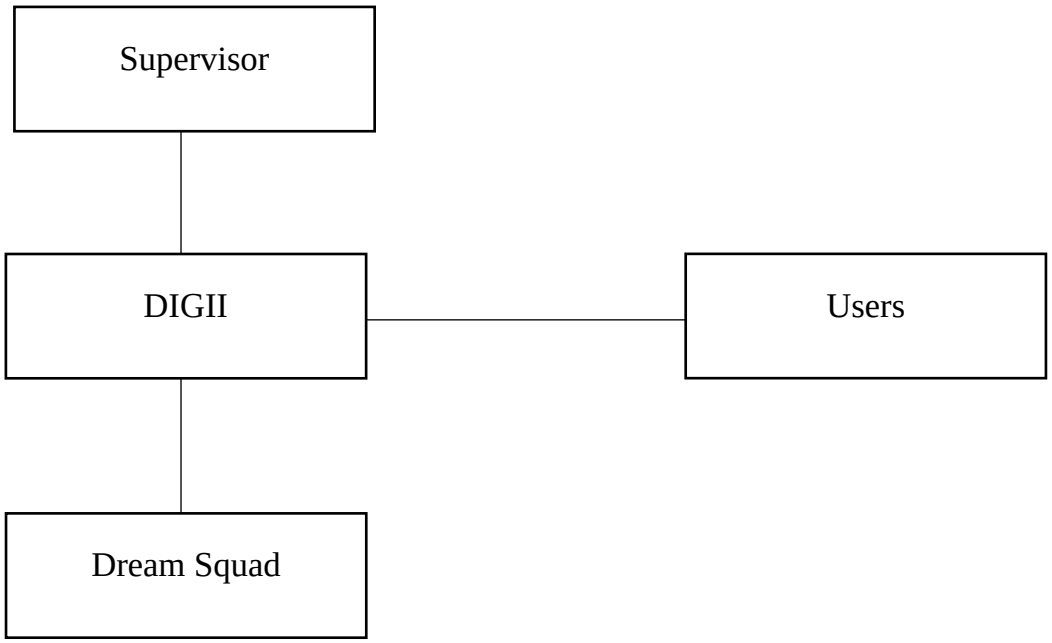

Figure 1: External Interfaces of the Online Ordering System

List of Responsible People to Contact

- **DIGII:** Software development and project team of ONLINE ORDERING SYSTEM. (İrem Yuvalı, İrem Bolat, Duygu Ada Divle, Gizem Erdoğan, Ivan Kuznetsov)
- **Dream Squad:** The quality control subcontractor of DIGII. (Merve Gözüm, Oğuzhan İnanmış, Deniz Yılmaz Gürbüz, Mirmardan Mammadov)
- **Supervisor:** The instructor of the CEN421 - System Analysis and Design lecture (named Havva Esin Ünal)
- **Users:** Customers, Restaurants, Deliverers, Administrators.

4.2 Internal Structure

Since responsibility of the project is shared among the members of DIGII, it is a project based organization **[5][6]**. The internal structure of the project organization is given in Figure 2.

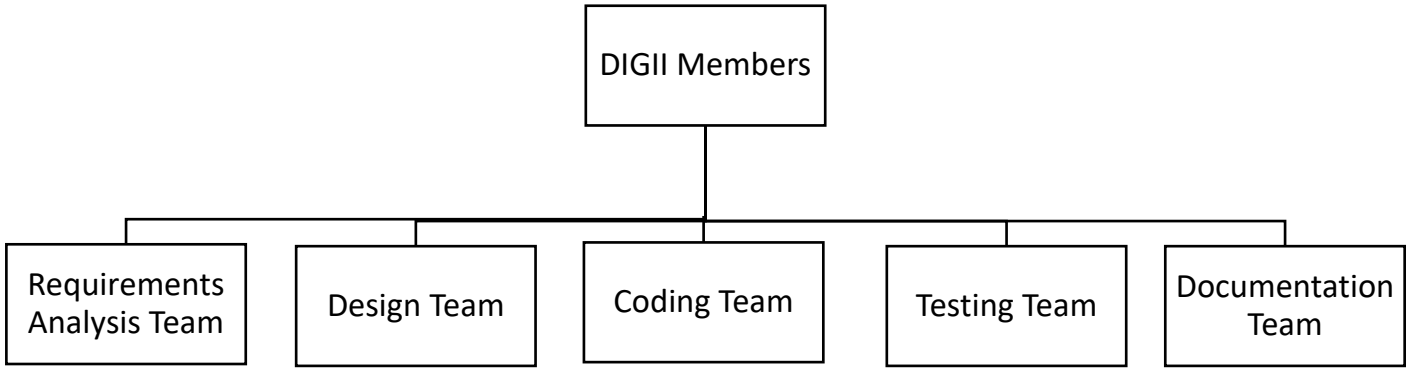

Figure 2: The Internal Structure of the Project Developing Organization

4.3 Roles and Responsibilities

4.3.1 External Entities

Supervisor: The instructor of the course, which will define the requirements for the project and will approve and accept both the product deliverables and the final product.

Subcontractor: It is the project team, which carries out the quality assurance of the project. In this regard, it is responsible from the preparation of review reports for the project documentation.

Users: They are the people, who will use the system namely, customers, restaurants, deliverers and administrators.

4.3.2 Internal Entities

The internal entities of the team DIGII are given in the following table below.

Names	E-Mail Addresses	Roles & Responsibilities
İrem Yuvalı	irem.yuvali@gmail.com	• Representative of the team DIGII • Requirements engineer • Designer • Programmer • Test engineer • Documentation team member
İrem Bolat	irembolat5@gmail.com	• Requirements engineer • Designer • Programmer • Test engineer • Documentation team member
Duygu Ada Divle	duyguadadivle@gmail.com	• Requirements engineer • Designer • Programmer • Test engineer • Documentation team member
Gizem Erdoğan	gizemerdogan098@gmail.com	• Requirements engineer • Designer • Programmer • Test engineer • Documentation team member
Ivan Kuznetsov	ivan.kuz.cs@gmail.com	• Requirements engineer • Designer • Programmer • Test engineer • Documentation team member

Table 3: Internal Entities of DIGII

Requirements Analysis Team: is responsible from collecting and documenting the system requirements as a whole.

Design Team: is responsible from planning how the required system functionality is to be provided.

Coding Team: is responsible from realizing the products designed.

Testing Team: is responsible from verifying that the developed system represents the requirements in a complete and correct manner.

Documentation Team: is responsible from preparing the system documentations intended for different audiences.

5. MANAGERIAL PROCESS PLANS

5.1 Staffing Plan

As there are only five members of the DIGII team, all members will work at every stage of the project. Online Ordering System phases is shown in Table 1.

No other members will get involved, five people will complete the whole project. The estimated monthly staff requirement is shown in Figure 3.

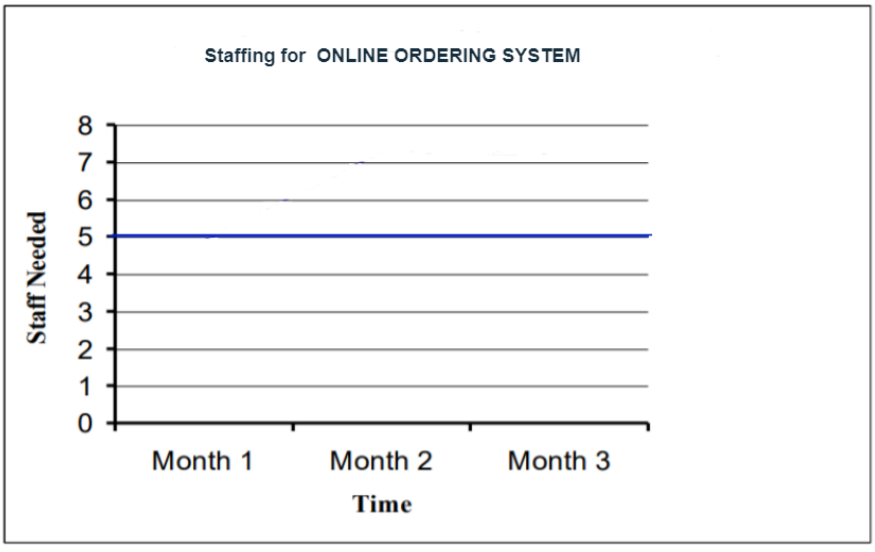

Figure 3: Staffing for Online Ordering System Project

5.2 Resources Acquisition Plan

- In the first parts of the project, free platforms are used. In the later parts of the project, if necessary, paid platforms will be used.
- For any kind of hardware and software needs the existing resources of DIGII will be used.

5.3 Project Staff Training Plan

The staff training plan of the team DIGII is given in the following table below.

Subjects	Entry Criteria	Exit Criteria	Training Method
Python	Understanding of Python syntax	Availability to build default Django application	Online Courses
PostgreSQL	Ability to write SQL queries	Ability to integrate PostgreSQL into python code	Online Courses & Ivan Kuznetsov
HTML/CSS/JS	Understanding of how all technologies interact with each other	Ability to use JS frameworks to write application frontend part	Online Courses
Unit Testing	Understanding of what unit testing is	Write unit tests for python application	Lecture & Online Courses

Table 4: Staff Training Plan