1. **Overview**
   1. Project Summary
      1. Purpose, Scope and Objectives

The aim of this project is to analyze a fully equipped program with all the functions needed for managers, members, trainers and dietician in a gym. Managers will be able to define membership packages, make gym and session definitions, enter Vitamin Bar products into the system, and communicate with members via phone numbers registered in the system. Through this system, members will be able to register for membership, purchase packages, load money on a wristband allocated to them, buy supplements, supplements, drinks, etc. from the vitamin bar in the hall through this wristband, view the nutrition program, view the training program, learn that their session is over through the wristband and use the locker by scanning the card on the wristband. Trainers will be able to define a member-specific training program and follow up members' health and sports. Dieticians will be able to prepare a special diet program for the members, see the health and sports information of the members, transfer the body muscle, fat, water etc. information of the members to the system, and get the report of these values through the system.

* + 1. Assumptions and Constraints

The project will be prepared by a team of 4 people and each member of the team will have a different task. However, each team member will be aware of the tasks of his/her teammates while implementing the part that is his/her responsibility and will complete the project as a whole, even though they have different tasks. The project construction will cover a period of 4 weeks.

* + 1. Project Deliverables

The project product will be uploaded to the relevant gym's system. All users (administrators, members, trainers and dietician) will be able to register and access the system from the gym's application. A dictionary of the system will be delivered with the product.

* + 1. Calendar and Budget

The project will consist of a 4-week period.

* In Week 1, the project implementation area will be investigated and gym managers, members, trainers and dietician will be interviewed.
* Week 2 requirements will be determined and the analysis phase will begin.
* Week 3 the analysis phase will be completed, SPMP will be created, class diagrams will be drawn and the design phase will begin.
* Week 4 the design phase will be completed and all documents will be organized and reviewed.

The cost of the project is 80.000 ₺.

* + 1. References

Reference documents for the software project management plan:

* UML Documentation of Bahriye AKAY
* IEEE Std 829-2008 : IEEE Recommended Practice for Software Requirements Specifications
* Object Oriented and Classical Software Engineering (Stephen R. Scach)

1. **Definitions and Abbreviations**

Definitions and abbreviations are given in the glossary section.

1. **Project Organization**
   1. External Interfaces

The project team consisted of a team of 4 people. The people doing the project assumed responsibility as a group.

* 1. Internal Structure

This software project consists of a team of 4 people.

* Project President Yusuf KORKMAZYİĞİT
* Project member Begüm ÖZTÜRK
* Project member: Bekir BALABAN
* Project member Alpay KOÇ

The main tasks of the people in the project are the same. But some responsibilities are divided into parts. The tasks of each team member will be explained in the next section.

* 1. Roles and Responsibilities
* Yusuf KORKMAZYİĞİT
* Investigation of working areas
* Creation of CRC card and class diagrams
* Managing the project process
* Preparation of dictionary and questionnaire
* Begüm ÖZTÜRK
* Investigation of working areas
* Creation of SPMP in IEEE format
* Preparation of test plans in IEEE 829-2008 format
* Preparation of dictionary and questionnaire
* Bekir BALABAN
* Investigating the functionality of functions
* Creation of form interfaces
* Making definitions for users
* Creation of Sequence diagrams
* Alpay KOÇ
* Making the dynamic modeling phase
* Creation of Use-Case diagrams
* Execution of analysis design phases
* Investigation of software realization tools

1. **Administrative Process Plan**
   1. Initial Plan
      1. Forecast Plan

Project delivery will take an estimated 4 weeks. It is planned to be delivered on December 30, 2023. The estimated cost will be around 80000₺.

* + 1. Staffing Plan

Apart from the 4-person project team, no other project member is needed.

* + 1. Fundraising Plan

One computer per member is sufficient for the project. At the same time, users will be given a small training to use the software. There will be no charge for the training and other expenses will be covered from the project team budget.

* + 1. Project Staff Training Plan

The project team is adequately equipped and does not require training.

* 1. Business Plan
     1. Work Activities

All team members will be involved in all work activities.

* + 1. Calendar Allocation

All stages are interconnected and will be done in a sequential manner.

* + 1. Resource Allocation

The stages in which the software resources used are given below.

* Visual Paradigm Online: CRC card and class diagrams
* Visual Studio: Defining form interfaces
  + 1. Budget Allocation

The places where the budget is used are indicated below.

* Budget allocated for the hardware resources required for the project: 4.000₺
* Budget allocated for the software resources required for the project: 10.000₺
* Budget allocated to the project team: 66.000₺
  1. Control Plan
     1. Requirements Control Plan

Tools used to monitor and control changes in requirements:

* Computers were used to test the product to check that the requirements of the requirements phase were met.
  + 1. Program Control Plan

Team members used their own knowledge and computers to check for glitches in the program.

* + 1. Budget Control Plan

Care should be taken not to exceed the budget allocated for the program. In case of exceeding the budget, help should be requested from sponsors.

* + 1. Quality Control Plan

Both the test team and the customer will check the quality of the program at certain stages.

* + 1. Reporting Plan

Schedule, budget and quality reporting mechanism will be in place to monitor requirements.

* + 1. Metric Aggregation Plan

For the development process, team members will perform all tests.

* 1. Risk Management Plan
* Budget and statute of limitations
* Disclosure of the project to competitors
* The potential for cost losses in case of mismatch in requirements is high.
  1. Project Closing Plan

All necessary documentation will be archived after the project is completed.

1. **Technical Process Plans**
   1. Process Model

The life cycle used is detailed.

* 1. Methods, Tools and Techniques

Visual Paradigm Online, Visual Studio and C# language will be used in this project.

* 1. Infrastructure Plan

The project's minimum system requirements for the computer:

* Microsoft Windows 10 operating system
* AMD Ryzen 5 10th Generation processor
* 8 GB RAM
* 1 GB disk space
* With a good internet connection, the program can run without a hitch.
  1. Product Acceptance Plan

Criteria for the project to pass the acceptance test:

* Matching customers' wishes with the product
* Completion of the project within the planned time
* Absence of disruptions in the operation of the project

1. **Supporting Process Plans**
   1. Configuration Management Plan
   2. Test Plan

The test plan in IEEE 829-2008 format is prepared separately.

* 1. Documentation Plan
* The dictionary will be delivered to the client at the end of the project.
* The document with the software stages will be delivered to the customer.
* Survey questions and documents will be delivered to the client at the end of the project.
  1. Quality Assurance Plan

Test reports will be provided in the next phase.

* 1. Review and Audit Plan

The reviews and audits to be organized during the project process have been planned and a plan has been prepared to manage the quality control process more effectively.