
Vision and Scope Document

for

HealthHub

Version 1.0 approved

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**Capital Ease
(Group 3)**

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Revision History

Name	Date	Reason For Changes	Version
Muhammed Fidan	03.04.2023	Filled out 3.1 & 3.2 & 3.3	v.0.1
Osman Faruk Derdiyok	03.04.2023	Filled out 1.1 & 1.2 & 1.3 & 1.4 & 1.5	v.0.2
Murat Çelik	04.04.2023	Filled out 4.1 & 4.2 & 4.3 & Appendices	v.0.3
Mustafa Çağrı Korkmaz	05.04.2023	Filled out 2.1 & 2.2 & 2.3	v.0.4
Everyone	05.04.2023	Revamp & Fixes	v.1.0

1. Business Requirements

1.1. Background

Protecting our health should be one of our most important tasks in our lives. We need to protect our health and we must do sports for our body to being more healthier. Unfortunately, in the busy modern world this is negligible. Our team has aimed to realize this project in order to protect our health and make our sport the most efficient.

1.2. Business Opportunity

HealthHub differentiates itself from other apps by offering many overarching health-related solutions. While some applications focus only on a specific health sub-branch, HealthHub covers many health areas such as physiotherapy, diet and fitness. In addition, it aims to provide synchronized access to users on mobile, web platforms and smartwatches, taking into account the time and cost situation.

Thanks to the developing technological tools, it becomes easier to reach our health goals. For example, we may receive reminders via smartphone apps to meet our goal of exercising regularly. These technological tools make our lives easier while helping us maintain healthy living habits. HealthHub also uses these technological tools to help us achieve our health goals and live a healthy life.

1.3. Business Objectives and Success Criteria

The main business goal of HealthHub is to collect the systems offered by the existing platforms, to connect the professional people related to the health field with the user. That is, people will have taken the right step to appropriate the situation. In this way, the communication problem is solved and productivity increases.

The success of the project depends on three key factors: deliveries, quality of work and distribution. "The Software Requirements Specification" document outlines the deliverables that must be completed by the designated release date, and each software release must fulfill the specified version requirements. Adherence to these guidelines will be used to assess the project team's success. The term of quality refers to the degree to which the entire system meets software development standards, and with a well-designed, high-quality implementation, the system should remain sustainable for years with minimal modifications.

1.4. Customer or Market Needs

The target market among our app users will be people who have a busy day for various reasons such as work and school. It should be determined what is missing for these users in the already written applications and what solutions will be offered for these problems should be explained. In the simplest terms, HealthHub should think about what people should do for health, that is, we should give the cake directly to the user to eat.

The final project will be released on both web, mobile and smart watches in a synchronized manner. Devices must have an internet connection to ensure synchronization and communication with professionals. The application will provide all the processes externally.

1.5. Business Risks

It can be difficult to discourage users from applications they are already using. This situation may pose serious risks for the future of the application. The solution is to constantly advertise, then make the users advertise the application.

As the functionality of the application increases, people's prejudice against the application may increase. As a solution, priority should be determined and these services should be offered to the user.

2. Vision of the Solution

2.1. Vision Statement

Our vision is to create a health and sports application that unites trainers, nutritionists, and users in a single platform. Our app will offer more features than single-purpose apps in the market by integrating all aspects of health and sports into a single product. HealthHub will provide personalized training programs, customized nutrition plans, and real-time progress tracking for users. Trainers and nutritionists will be able to collaborate and provide personalized advice and feedback to users to improve their progress. We will benefit from the power of data to ensure more accurate real-time insights and help people achieve high health standards. Users' perspectives on this kind of app will change and they will be happy and healthier than ever.

2.2. Major Features

Users:

- *Personalized training programs*
- *Customized nutrition plans*
- *Real-time progress tracking and monitoring*
- *Access to a library of exercise videos, meal plans, and health tips*
- *Ability to connect with certified trainers and nutritionists*
- *In-app messaging for real-time support and feedback*
- *Integration with wearable fitness devices to track activity levels*

Trainers:

- *Ability to create and manage training programs for clients*
- *Track and monitor client progress in real-time*
- *Offer personalized feedback and advice*
- *Collaborate with nutritionists to create comprehensive fitness plans*
- *Showcase expertise and connect with potential clients*
- *Integration with wearable fitness devices to track client activity levels*

Nutritionists:

- *Ability to create and manage custom nutrition plans for clients*
- *Track and monitor client progress in real-time*
- *Offer personalized recommendations and advice*
- *Collaborate with trainers to create comprehensive fitness plans*
- *Showcase expertise and connect with potential clients*
- *Integration with wearable fitness devices to track client nutrition levels*

Overall:

- *AI and data-driven insights to provide personalized recommendations and insights for users, trainers, and nutritionists*
- *In-app communication and collaboration tools for seamless communication between users, trainers, and nutritionists*
- *Integration with wearable fitness devices to provide a more comprehensive picture of user activity and nutrition levels*
- *Customizable dashboard and interface for each user, trainer, and nutritionist based on their specific needs and preferences*

2.3. Assumptions and Dependencies**Assumptions:**

- *Users consent to the software collecting and analyzing their personal health and athletic data.*
- *Users will pay for access to the application's premium features and services.*
- *Trainers and nutritionists will provide their contact information and professional qualifications to the application for verification.*
- *Users, trainers, and nutritionists will have access to compatible devices and technologies (such as wearables and mobile devices) to enable comprehensive tracking and monitoring.*
- *The application will obey the data privacy regulations and ensure the security of all personal and sensitive data collected and stored.*
- *For individualized advice and suggestions, users, trainers, and nutritionists will have access to dependable and current nutrition and exercise databases.*

Dependencies:

- *To deliver individualized suggestions and real-time insights, the application will depend on technologies like AI, data analytics, and cloud-based infrastructure.*
- *The capacity of outside suppliers and development partners to supply the required features and functionality will be crucial to the application's success.*
- *The application's ability to provide personalized nutrition and fitness plans will depend on the availability of reliable nutrition and fitness databases and algorithms.*
- *Building and sustaining trusting connections with licensed trainers and nutritionists will be essential to the platform's success in attracting their involvement.*
- *The network speed and storage capacity of the system where the application is installed should be sufficient to handle any potential significant volumes of user data.*
- *To provide continuous data backup, backup mechanisms will be required.*
- *To protect sensitive user data and stop illegal access, a strong security layer will be required. This layer could incorporate security tools like two-factor authentication or OAuth.*

3. Scope and Limitations

3.1. Scope of Initial Release

For Users:

- *Users can create an account and sign in.*
- *Users can monitor their exercise routine.*
- *Users can record exercises they complete, such as sets, reps, and weight lifted.*
- *Users can establish workout goals and receive notification to help them remain on track.*
- *Users can analyze their advancement over time by getting reports that shows graphs and charts.*
- *The application will provide instructional videos and advice for enhancing workout techniques for users.*
- *Users will be able to create custom workout plans based on their preferences and goals.*
- *Users can add/connect each other and compete for bragging rights. They can also share their progress*

For Trainers:

- *Trainers can create accounts and link them to multiple clients.*
- *Trainers can create workout plans and assign them to specific days for their clients .*
- *Trainers can check their client's progress and modify the plans if needed.*
- *Trainers can communicate with their clients through the app to provide feedback and support.*
- *Trainers will have access to collection of instructional videos and tips for improving form.*
- *Trainers will be able to analyze reports that shows their clients development over time, including graphs and charts.*

For Nutritionists:

- *Nutritionists can create accounts and link them to multiple clients.*
- *Nutritionists can create custom meal plans for their clients and assign them to specific days.*
- *Nutritionists can check their client's progress and modify the plans if needed.*
- *Nutritionists can communicate with their clients through the app to provide feedback and support.*
- *Nutritionists will have access to collection of resources and tips. Such as healthy eating or meal planning.*
- *Nutritionists will be able to analyze reports that shows their clients development over time, including graphs and charts.*

3.2. Scope of Subsequent Releases

In subsequent releases, the following features can be considered for inclusion:

For Users:

- *Integration with wearable devices to automatically track workouts*
- *Social media sharing of workout progress and achievements*
- *Integration with popular fitness apps for additional workout suggestions and resources*
- *Gamification elements such as challenges and rewards to motivate users*

For Trainers:

- *Integration with a scheduling system for booking training sessions*
- *Enhanced reporting and analysis tools for monitoring client progress*
- *Integration with popular training certification programs for continuing education*

For Nutritionists:

- *Integration with popular nutrition tracking apps*
- *Enhanced reporting and analysis tools for monitoring client progress*
- *Integration with popular nutrition certification programs for continuing education*

It should be noted that the specific features to be included in subsequent releases will be determined based on user feedback, market research, and development feasibility.

3.3. Limitations and Exclusions

- The app will not track other health metrics such as sleep or heart rate. It will only focus on tracking exercises and nutrition.
- The app will not include any equipment or clothing sales or promotions. It will solely focus on tracking workouts and nutrition.
- Counseling will not be available anywhere except in certain places.(Eg No home visit by trainers/nutritionists)
- The app will not include any food sales or promotions.

4. Business Context**4.1. Stakeholder Profiles**

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
<i>Developer Team</i>	<i>Ensuring the development and</i>	<i>Application efficiency and new</i>	<i>Efficient technologies, inexpensive cloud</i>	<i>Making the most efficient and</i>

	<i>updating of the application</i>	<i>technology research</i>	<i>technologies, new systems</i>	<i>inexpensive development (budget)</i>
<i>IT Staff</i>	<i>Providing technical support for the efficient operation of the application</i>	<i>Database control, system optimization, IT support</i>	<i>Statistics tracking, application performance, efficient db</i>	<i>To ensure user security and application continuity.</i>
<i>App Users - Athletes</i>	<i>Getting support on nutrition and sports</i>	<i>Getting information, doing sports, eating healthy, getting support from the application</i>	<i>Sports and nutrition advice, programs, health, new friendships</i>	<i>App features restriction by subscription</i>
<i>Trainers</i>	<i>Providing support to users with sports information</i>	<i>Adding new information to the application, supporting the user, tracking statistics</i>	<i>Effective programs, user statistics, new friendships</i>	<i>cannot access any information other than users' sports data and nutrition data.</i>
<i>Nutritionists</i>	<i>Providing support to users with nutritional information</i>	<i>Adding new information to the application, supporting the user, tracking statistics</i>	<i>New nutritional strategies, harmonious sports-nutrient balance, new tastes</i>	<i>cannot access any information other than users' sports data and nutrition data.</i>
<i>Business Owners</i>	<i>Increasing the revenues of the business and ensuring user satisfaction</i>	<i>Ensuring user satisfaction, hiring new people, providing bureaucracy</i>	<i>Economic gain, new customers, app innovations</i>	<i>Complying with regulations and protecting user rights</i>
<i>Business receptionists</i>	<i>Coordinating between users and staff</i>	<i>Communicating with the user, making reservations, coordinating</i>	<i>Effective communication, new friendships, coordination</i>	<i>No right to change or delete any data except for certain reasons</i>

4.2. Project Priorities

<i>Dimension</i>	<i>Driver (state objective)</i>	<i>Constraint (state limits)</i>	<i>Degree of Freedom (state allowable range)</i>
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<i>Schedule</i>	<i>documentation 1 to be available by 04/2023 documentation 2 to be available by 05/2023 documentation 3 to be available by 06/2023 release 1.0 to be available by 08/2023 release 1.1 to be available by 10/2023 release 2 to be available by 01/2024</i>	<i>It should take the most accurate and flexible steps in each step. Determining future plans and determining plans from today</i>	<i>+5 days flexibility. Team activity and vacation from time to time to ensure efficiency</i>
<i>Features</i>	<i>Producing the right resource for sports and nutrition and bringing users and staff together</i>	<i>An application that can ensure application security, restrict data, fast response</i>	<i>It should contain 60% features in the first version. In the second step of the first version with more users, it is aimed to host bug fix and 70% features. It is aimed to include 90% features in the second version.</i>
<i>Quality</i>	<i>A stable, fast and informative application</i>	<i>There should be restrictions due to compliance with some regulations. Design that should provide satisfaction to the user. subscription system</i>	<i>User surveys will also be conducted for beta users. Happiness index will be determined by pre-release and post-release surveys. Beta version users will vote for new features. The satisfaction rate was determined as 85% in every development.</i>
<i>Staff</i>	<i>Small and high quality team</i>	<i>maximum team size is 4 developers + 2 testers + 2 beta users</i>	<i>It is aimed that the developers can be friends as well as their professional work. It is aimed to get a great place to work tag. With each release, +2 developers and unlimited beta users will be added.</i>
<i>Cost</i>	<i>Minimum cost for a quality, efficient application</i>	<i>The starting price is 10 thousand euros. In addition, staff salaries.</i>	<i>A 10% positive R&D budget has been determined for each release. It is expected that a certain amount of the income will be spent on the application. In the long run, a portion of the revenue will be reserved for developers.</i>

4.3. Operating Environment

In the first two versions, the application will work in Türkiye. Our goal is to bring together users, trainers and nutritionists in different options, online and face-to-face. It is understood that trainers and nutritionists will determine the working days and hours themselves and will set the reservation dates.

The data will be kept in two different places. This is important for both data security and backup. One will be kept in the company of the agreed businesses and one will be kept by us.

Fast response is one of the priorities. It is aimed to make every transaction under 1 second and to inform the user at the end of each transaction. When there are problems and interruptions in the application, the subscription time will be added to the user as twice this time. Additional discounts will be provided for user satisfaction.

Application performance will be regularly monitored and the system will be optimized for minimum interruption. Cloud technology will also be used for best use.

Application security and data control is our most important goal. For this reason, some precautions will be taken for both the user and the application. The lock screen can be activated on the user's side when entering the application. SMS control will be provided in the information update. 3D secure will be used in the payment system.

Appendices

Requirements Engineering Risk

Risk Identification

- *Engineering Team Risks*
 - *Engineers' risk of illness and accident.*
 - *Risk of engineers quitting.*
 - *Insufficient experience of engineers.*
 - *Impaired performance due to low earnings.*
 - *Communication problems with each other*
 - *Wrong technology choices*
 - *Engineers who are not accustomed to working with Agile*
 - *Insufficient educational support*
 - *Ineffective teamwork*
- *Project Management Risks*
 - *Insufficient project planning*
 - *Lack of interviews with stakeholders*
 - *Inadequate budget allocation*
 - *Failure to address priority conflicts*
 - *Technical difficulties*
 - *Resource availability*
 - *Errors in setting backlog*
- *Schedule Risk*
 - *Risks in collecting resources and scheduling system functions.*
 - *Time is not estimated perfectly.*
 - *Scope creep risk.*
- *Quality Risks*
 - *High complexity in implementation.*
 - *Less use of future technologies.*
 - *Performance risks.*
 - *Lack of optimization*

- The database used in the system cannot process the data as fast as expected.
- **Design Risks**
 - Insufficient level of detail design.
 - Test cases and samples cost risks.
 - Wrong or defective design.
 - Security design risks.
 - Wrong pattern selection
 - Reusable software components contain inconsistencies, and can't be reused as planned.
- **External Risks**
 - Hardware issues.
 - Change laws by the government.
 - Problems with Trainers and Nutritionist deals
- **Budget Risk**
 - An increase in the exchange rate
 - Increasing price of cloud technology used

Impact	H	<ul style="list-style-type: none"> - Communication problems with each other - Insufficient project planning - Insufficient level of detail design. - Change laws by the government. - Wrong technology choices - Ineffective teamwork 	<ul style="list-style-type: none"> - Inadequate budget allocation - Less use of future technologies. - Test cases and samples cost risks. - Wrong or defective design. - Security design risks. - Hardware issues. - Lack of optimization - Increasing price of cloud technology used 	<ul style="list-style-type: none"> - An increase in the exchange rate
	M	<ul style="list-style-type: none"> - Risk of engineers quitting. - Impaired performance due to low earnings. - Wrong pattern selection - Insufficient educational support - Database used in the system cannot process the data as fast as expected 	<ul style="list-style-type: none"> - Engineers' risk of illness and accidents. - Insufficient experience of engineers. - Lack of interviews with stakeholders - High complexity in implementation. - Errors in setting backlog - Problems with Trainers and Nutritionist deals 	<ul style="list-style-type: none"> - Time is not estimated perfectly. - Performance risks.
	L	<ul style="list-style-type: none"> - Resource availability - Engineers who are not accustomed to working with Agile 	<ul style="list-style-type: none"> - Failure to address priority conflicts - Risks in collecting resources and scheduling system functions. 	<ul style="list-style-type: none"> - Technical difficulties - Scope creep risk. - Reusable software components contain inconsistencies, and can't be reused as planned.
		L	M	H
Probability				

Risk	Rate (X/ 10)	Severity	Solution
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Communication problems with each other	7	Medium	A team sincerity meeting will be held every week. There will be an event to have fun once a month.
Insufficient project planning	7	Medium	It will be discussed in detail with the project stakeholders. Agile will be used to be flexible in the project process.
Insufficient level of detail design.	7	Medium	Brainstorm with the team.
Change laws by the government.	6	Medium	News on the agenda will be followed
Wrong technology choices	5	Medium	New technologies will follow. There will be presentations for new technologies every week.
Ineffective teamwork	6	Medium	External consultation will be sought to strengthen teamwork.
<i>Inadequate budget allocation</i>	9	High	Budget planning will be reviewed monthly. Developments will be aimed to be completed beforehand.
<i>Less use of future technologies.</i>	8	High	Presentations will be organized and trainings will be attended for the team to follow and develop the latest technology.
<i>Test cases and samples cost risks.</i>	8	High	Testing will also be performed at each development step. This will prevent mistakes early.
<i>Wrong or defective design.</i>	8	High	Planning for the best design will be done early. Staying up to date will be targeted.
<i>Security design risks.</i>	9	High	Cloud technologies will be supported. Support can be obtained from a third company.
<i>Hardware issues.</i>	8	High	Necessary equipment will be purchased to avoid hardware deficiencies. To avoid problems, some solutions will be provided by the cloud.
<i>Lack of optimization</i>	8	High	Necessary technologies will be used for optimization tracking. Feedback will also be received through surveys.
<i>Increasing price of cloud technology used</i>	9	High	Alternatives will be determined. Pricing will follow.

<i>Engineers' risk of illness and accident.</i>	7	Medium	Each team member will have health insurance. Allowance will be granted for speedy recovery.
<i>Insufficient experience of engineers.</i>	7	Medium	Training will be provided for team development. Emphasis will be placed on peer learning.
<i>Lack of interviews with stakeholders</i>	8	Medium	Frequent meetings will be held with stakeholders. Information will be obtained at every step.
<i>High complexity in implementation.</i>	7	Medium	A specific code standard will be determined. Care will be taken to clean code.
<i>Errors in setting backlog</i>	7	Medium	The project leader will follow the backlogs. The leader will make the plan in the smallest pieces.
<i>Problems with Trainers and Nutritionist deals</i>	7	Medium	Agreements will be detailed. It will be focused on providing target user satisfaction. By increasing the number of agreements, the options will be increased in practice.
An increase in the exchange rate	10	High	Budget planning will be renewed. Alternative technologies will also be explored. Team salary will not be compromised.
<i>Time is not estimated perfectly.</i>	9	High	Priorities will be determined. If necessary, additional hours will be made or additional team members will be recruited.
<i>Performance risks.</i>	8	High	Performance tracking will be provided with visualizations. Power BI can be used for this. Cloud technologies will also receive this service.
<i>Technical difficulties</i>	6	Medium	Technology will be learned together. Peer learning is also important.
<i>Reusable software components contain inconsistencies, and can't be reused as planned.</i>	6	Medium	The team will set the code standard.
<i>Scope creep risk.</i>	7	Medium	Precautions will be determined by the team.

Overall Schedule of Project Activities and Deliverables

- Increment 1 (Inception Phase)

- Vision & Scope Document
- Requirements engineering risks & risk management plan
- Schedule (including tasks, assignments, deliverables, dates)
- Size of the software: The number of functions should not be less than 50
- Presentation of Vision and Scope of the Project, Review & approval – Week 6
- **Increment 2 (Inception Phase)**
 - Have identified 70% of use cases, with brief descriptions
 - Prototypes, as necessary
 - Normal flow of events and significant alternate flows of events reviewed by key stakeholders
 - As-is System Analysis and To-be System Design- Presentation Week 12
- **Increment 3 (Elaboration Phase)**
 - Have identified 100% of use cases, the normal flow of events, and significant alternate flows of events
 - UI Prototypes- Mockups
 - Data Dictionary
 - Have an SRS package for stakeholder review
 - Full SRS package reviewed with stakeholders
 - Project Presentation including SRS Document and Lessons Learned Report-Week 14

Workload/Effort Record

- All Members
 - Conversations regarding the team's composition and work atmosphere.
 - Generating ideas and selecting the project idea.
 - Determining & filling the project's scope and features.
 - Completing and revising the Scope & Vision Document.