# **PROJECT PROPOSAL FORM**

**PROJECT NUMBER : 001** 

PROJECT NAME : Web base online hospital appointment

COMPANY NAME : Cyborg

# A.1. Preliminary Project Information

### A.1.1

Project No	001
Project Name	Web based online hospital appointment reservation system
Start Date	10/17/2016
End Date	01/20/2017
Time	70 days

### A.1.2

Project Manager					
Name Surname	Obianuju C. Okafor	ID No	128423		
Title/Role	Project manager/ Programmer				
Address	Basar apartment tuzla,famagusta,TRNC				
Phone	05338473830	Fax			
Email	Obianuju okafor@yahoo.com				

# A.2 Company Information

### A.2.1

Company Owner					
Name Surname	Obianuju C. Okafor	ID No	128423		
Title/Role	Manager				
Address	Basar apartment tuzla,famagusta,TRNC				
Phone	05338473830	Fax			
Email	Obianuju okafor@yahoo.com				

### A.2.2

Company Staff Distribution								
Status	Phd.	Msc.	Undergraduate	Technic/High School	Other	Total		
Production	1	2	1	-	-	4		
R & D	1	1	1	-	-	3		
Other	-	-	-	-	-	-		

### A.2.3

	Year/Month	2015/12
	Paid-in capital	30,000
	Net Sales Revenue	60,000
	Total Overseas Sales	10,000
Establishment of the	R & D Expenses	15,000
previous year or the last	The Original Product	20,000
Interim Accounting Period	Sales Revenue	
Belongs Financial	Current Assets	90,000
Information (TL)	Receivables from	20,000
. ,	Shareholders	
	Common Construction	10,000
	Costs Over Years	
	Short-Term Debt	10,000
	Progress Income	40,000
	Short-Term Bank Debt	20,000
	Equity	55,000
Establishment of the Last	50,000	
Three Year Average Net		
Sales		

### A.2.4

List of (	Completed / Ongoing R & D Projects
1.	Online banking system
2.	Online cinema reservation system
3.	Hotel reservation system
4.	Online car reservation system
5.	Mobile based hospital appointment reservation system

# **B.1 Introduction to Project**

### **B.1.1**

### Summary of Project

This project is on a Web base online hospital appointment reservation system project. The project is an application with which patients can be able to reserve appointments with various doctors and also the doctors can view and track their appointments anywhere they are.

### **B.1.2**

#### Key Words

- 1. Web based appointment system
- 2. Hospital appointment system
- 3. Patient appointment system
- 4. Appointment

### **B.1.3**

#### **Reason of Starting Project and Aim of Project**

The reason for starting this project is to explore a path that is not usually threaded i.e there are not that many applications like this in Northern Cyprus. This application is going to be one of it's kind because new features are going to be added which will set it apart from other similar systems. The aim of this project is to create an application to help patients to book appointment and also that'll help doctors to keep track of their available appointments.

### **B.1.4**

#### Innovative Aspects of Project

- Patients can book appointments without having to come to the hospital.
- Doctors can receive apointments and can keep track of appointments wherever he is.
- Coordinating various calendars and the availability of personnel and coming up with. various time slots for the patient's appointment.
- Reserving equipments and rooms for this appointment.
- Alerting patients on earlier available slots.

### **B.1.5**

#### Methods to be Applied

The system is going to be a client/server based system. The method we are going to be applying to achieve this **is** client-side/server-side scripting. Client-side scripts will be embedded with HTML and CSS. In contrast the server-side scripts is written in the languages PHP, Java, and server-side JavaScript.

HTML and CSS is used to give the system a good appearance and structure while PHP will be used to communicate with database.

Balancing the execution between client and server scripts is used to minimize the communication load, server load and/or response time.

### **B.1.6**

#### **Economic and National Outcomes**

This project is going to improve the health care economic sector of Northern Cyprus . Due to the fact that patients don't have to come to the hospital to book appointments, this will encourage them to book more appointments and more appointments means more employment opportunities for doctors .

All these contribute in the raising of the income of the doctors and ultimately national income of Northern Cyprus.

# B.2 Reason of Starting the Project, Methods and R&D Stages

### **B.2.1**

1- Explain the reason of starting this project. (Max 500 charachter)

We researched and found out that here in Northern Cyprus appointments with doctors are made by coming to the hospital, therefore an application like this doesn't exist yet. Creating this application will be like a breathe of fresh air, it will remove the need for people

to have to travel all the way from their various locations to the hospital, some people might even have had to miss work just so they can make an appointment.

But with this application people can book appointments form the comfort of their homes, offices e.t.c

Even doctors will no longer have to be present at their offices at all times, they can receive appointments wherever they are even when they are off the clock.

They can also manage and organize their appointments wherever they are.

#### 2- Explain the purpose of this project.

This project is aimed at making the lives of people who will use it easier

- 1. Patients will be able to book appointment with a doctor from any department of their choice.
- 2. Patient can choose a time that better suits them.
- 3. Doctors can receive appointments even when they are not in the office.
- 4. Doctors can manage appointments properly.

#### 3- Explain

- output of project
- $\circ$  ~ national / international standards if exist
- the specific objectives of the project
- o success criterias

The output of this project is an online doctor appointment reservation system.

Since we are developing a web application the standard we are basing the project on is the **World Wide Web Consortium (W3C)** it is **the main international standards** organization for the World Wide Web (abbreviated WWW or W3).

The specific objective of this project is to provide an application that enables :

- 1. Patients to book an appointment with any availabe doctor .
- 2. Doctors to view their appointments and manage them properly.
- 3. Coordinating of various calendars and finding available time slots for appointment.
- 4. Reserving equipments and rooms for appointment.
- 5. Alerting patients in case there is an earlier available time slot.

#### Success criterias:

- 1. Project is completed on time.
- 2. Project is completed on budget.
- 3. Project meets the appropriate quality targets.
- 4. Project delivered all items within the agreed scope.
- 5. Project deliverables are fit for purpose.
- 6. Project meets the commercial objectives for profit, revenue etc.
- 7. Project meets the functional requirements.
- 8. Project meets the non-functional requirements e.g. scalability, stability,
- availability, performance.
- 9. Project team satisfaction target is achieved.
- 10. Project handover to operational team was documented and completed appropriately.
- 11. Training was delivered as planned to the appropriate teams.
- 12. Customer satisfaction target is achieved.
- 13. Customer/Staff awareness about the project was raised to the appropriate level.
- 14. Project uses the approved technology.
- 15. Project meets all internal appropriate information security policies.

16. Project meets regulatory and compliance targets e.g. health and safety, legislation.

17. Project meets other targets or benefits identified by the business case

4- Explain

- the methods to be applied during R&D activities
- o applications
- technics and tools to be used
- standards to be followed under the workflow

The model we have chosen to use is **component based software engineering**, we decided to do this to reduce software development time, maintenance and production costs. We also decided to do this because of the few personnels involved in the project and because it'll increase productivity.

We plan to do this by reusing modules, functions and objects from previous software projects, modifying existing components to suit our need and lastly create new components. The components we are going to use without modification are the **black box component** they are:

- 1. Login page.
- 2. Registration page.
- 3. Log out page.

The components we are going to modify are the **white box component** they are:

- 1. Home page.
- 2. Account page.
- 3. Contact page.
- 4. Admin module.

The entirely new components are :

- 1. Appointment page.
- 2. Department page.

#### **Project Workflow:**

#### 1. Feasibility and Pre-research:

A comprehensive feasibility study of social, economical and technicalaspects has also been made and implemented as below:-

#### Social Feasibility?

- It has simplified the booking appointments procedure.
- It encouraged more patients to book appointment.
- Patients and doctors had a huge acceptance to thenotion.
- It had a good social impact and no objections or problems regarding the project is found

#### **Economic Feasibility**

The project is economically Feasible, it was proven to be of ample benefits to the Northern Cyprus economy:

- It provides more employment opportunities for doctors.
- Increases the income of doctors.
- It saves travel time and travel costs.
- It increases the general revenue of the health sector.

#### **Technical Feasibility**

• Minimum requirement for execution of the project is a php supporting operating system since the connection to the database will be made using PHP and SERVLETS, minimum of 64 MB of RAM, a database software, a server and a web

browser with which we were previously equipped with.

#### 2. System Design:

According to the system process, the system can be divided into three categories of users: the first users are those who want to make an online appointment. The second users are the hospital staff. The third is the database administrator

The system will be designed in a way that it has three modules:

- 1. Patient module: this will enable patients to :
  - Create an account.
  - Log in.
  - They will also be able to book, view, edit, cancel an appointment.
  - They will be able to edit profile.
- 2. Doctor module: this will enable doctors to :
  - Create an account .
  - Log in.
  - They will be able to view and manage appointments.
  - They will be able to edit profile e.t.c.
- **3.** Administrator module: The system will also be designed in a way to allow an administrator to :
  - Monitor all activities.
  - Add and remove users.
  - View, cancel appointments .

Users who visit the website can also get information on the various departments and doctors from the website.

Appropriate permissions are set in the system corresponding to the different user module set.

#### 3. <u>Software development:</u>

To develop this system we are going to use a programming languages like:

- 1. HTML (Hyper Text Mark –up language) for overall structure
- 2. CSS (Cascade Style Sheet) to give the website a nice appearance
- 3. JavaScript, Ajax to implement most of the functions
- 4. PHP to connect the site to database

We are also going to be using IDE like:

- 1. Eclipse
- 2. Aptana Studio

For Database we will be using :

1. MySQL , PhpMyAdmin

And to deploy the website we will use the following tools:

- 2. Amazon Web services
- 3. FireZilla
- 4. Name cheap

#### 4. <u>Prototype implementation and testing work:</u>

After the proposed system is developed, the first test that is carried is the **unit test**. Individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures and operating procedures are tested to determine whether they are fit for use.

After this the entire system is integrated and **integration test** is carried out . Here individual software modules are combined and tested as a group. if the product passes this test an appropriate technical committee and an appropriate management committee will be chosen for the responsibility of implementation.

The product version of system will be delivered to the client, the technical team will assemble and deploy the system as needed and a final test will be carried out by the clients this test is called **acceptance test.** This is a test conducted to determine if the requirements of a specification or contract are met .

Acceptance testing is also known as user acceptance testing (UAT) and end-user testing.

#### 5. Maintanance:

In order to maintain this system:

- There will be regular Identifying and repairing 'bugs' or faults in software.
- There will be upgrading software as necessary.
- Monitoring available system resources, such as disk storage space and system speeds to ensure that disks do not become over full or that system performance is unacceptable.
- Maintaining network servers and responding to problems as they arise.
- Managing interfaces with other systems, such as internet, email and intranets.
- Providing, monitoring and upgrading security measures such as virus protection, encryption, firewalls and 'hacker' prevention.
- Responding to requests for assistance or suggestions from users.

#### 5- Explain

- the contribution of national/international technological development if exist
- $\circ$  starting a new research and development projects within or outside the company
- $\circ$   $\$  launch new applications or research studies in different technology areas

With whom we can cooperate?

Expectations:

Published work:

Can your output be an input for other similar national/international projects?

This system is going to contribute to the the national/international development in many ways

- Since this system is going to make use of cloud computing, with cloud computing, companies can reduce the size of their own data centers or eliminate their data center footprint altogether. The reduction of the numbers of servers, the software cost, and the number of staff can significantly reduce IT costs without impacting an organization's IT capabilities.
- It allows things to be done automatically thereby speeding up technological processes, this is due to the fact that it frees up the staff who would otherwise spend tedious amounts of time checking the availability of these resources manually.

Also this current systems can be used further down the line in other projects. The way the system is being developed most of it's components can be re-used by other systems also the project can also be further developed into a mobile application.

#### Expectations

At the end of the last week we expect to present a system that is working perfectly, users should be able to book appointments and doctors should be able to receive these appointments.

# **B.3 Innovative and Unique Aspects**

#### **B.3.1**

#### 1- Describe

- o differences
- o advantages
- o superiority

#### compared to other similar projects.

#### DIFFERENCES

When a patient makes an appointment request, the system is able to evaluate the patient's needs for that appointment and automatically check the availability of the doctors, any assisting staff, and equipment.

This means coordinating various calendars and the availability of personnel and coming up with various time slots for the patient's appointment thus providing them with multiple options to choose from.

#### ADVANTAGES

- 1. Saves travel time of patients.
- 2. Patients can choose time that is convenient for them.
- 3. It is flexible doctors can receive appointments from anywhere and the patients can book appointments from anywhere.
- 4. Not only does this facilitate the patient's access to making an appointment, it also frees up the staff who would otherwise spend tedious amounts of time checking the availability of these resources manually.

#### SUPERIORITY

The system is reliable, highly adaptable and user-friendly. It is also easy to understand. Since the system is entirely online, there is no need for complicated installations or updates. The system is incredibly straight forward If there are still any outstanding questions, customers can send their enquiries as a message and the customer care will look into it.

#### **B.4.1**

#### 2- Who can contribute to this project in your company?

- 1. Project manager: oversees the project and ensur it is running properly.
- 2. System analyst: designing and implementing information systems.
- 3. Database developer/Administrator: Maintains and oversees the database of the system.
- 4. Programmer : writes software code.
- 5. User interface designer/ web developer: designs the user interface.
- 6. Tester : perform various test on system.

# C.1 Gantt Chart and Work Packages

### C.1.1 Gantt Chart

1	٠	-	<ul> <li>Project</li> <li>Feasiibility and</li> <li>Pre-Research</li> </ul>	16 days	Mon 10/17/16	Mon 11/7/16		Obianuju C.Okafor	1
2	•	*	<ul> <li>Project Process and Economic Feasibility</li> </ul>	6 days	Mon 10/17/16	Mon 10/24/16		Fatima Habib, Hiba Jlilati, Maha Sailan,Ob	
3	ŧ	->	Project Initiation	1 day	Mon 10/17/16	Mon 10/17/16		Fatima Habib, Hazal Besmel,Hi	Fatima Habib, Hazal Besmel, Hiba Jiilati, Maha Sailan, Obianuju C. Okafor, Roxana Mirsh
4	•	•	Economic feasibility analysis	1 day	Tue 10/18/16	Tue 10/18/16	3	Fatima Habib, Hazal Besmel, Hiba Jlilati,Maha	🃩 Fatima Habib, Hazal Besmel, Hiba Jillati, Maha Sailan, Obianuju C. Okafor, Roxana M
5	•	->	Analysis of similar products	1 day	Wed 10/19/16	Wed 10/19/16	4	Fatima Habib, Hazal Besmel, Hiba Jlilati,Maha	🏣, Fatima Habib,Hazal Besmel,Hiba Jlilati,Maha Sailan,Obianuju C.Okafor,Roxan
6	۲		Market research	1 day	Thu 10/20/16	Thu 10/20/16	5	Fatima Habib, Hazal Besmel,Hi	📥 Fatima Habib, Hazal Besmel, Hiba Jlilati, Maha Sailan, Obianuju C.Okafor, Rc
7	•	•	requerment of cost analysis of relevant sectors	1 day	Fri 10/21/16	Fri 10/21/16	6	Obianuju C.Okafor Roxana Mirshahvalad	-Obianuju C.Okafor,Roxana Mirshahvalad
8	٠		Analysis of Workflow	1 day	Mon 10/24/16	Mon 10/24/16	7	Hiba Jlilati	Hiba Jlilati
9	۲	*	Technological Feasibility	10 days	Tue 10/25/16	Mon 11/7/16		Obianuju C.Okafor	
10	ŧ	-,	Output technical and technologica	1 day	Tue 10/25/16	Tue 10/25/16	8	Obianuju C.Okafor	Obianuju C.Okafor
11		-,	Determine the technologica resources	1 day	Wed 10/26/16	Wed 10/26/16	10	Fatima Habib, Maha Sailan	Fatima Habib, Maha Sailan
12	٠	-	Literature and patent research	1 day	Thu 10/27/16	Thu 10/27/16	11	Adama Isah Muhammad Roxana	Lang Adama Isah Muhammad,Roxana Mirshahvalad
13		-,	Examination of similar international projects	1 day	Fri 10/28/16	Fri 10/28/16	12	Hazal Besmel	Hazal Besmel
14	۲		Conceptual design	2 days	Mon 10/31/16	Tue 11/1/16	13	Roxana Mirshahvalad	Roxana Mirshahvalad
15	٠	-	Potential research and methods	1 day	Wed 11/2/16	Wed 11/2/16	14	Obianuju C.Okafor	bianuju C.Okafor
16	•		Software requirement analysis	3 days	Thu 11/3/16	Mon 11/7/16	15	Obianuju C.Okafor	Obianuju C.Okafor

17		*	<ul> <li>System Design technology</li> </ul>	13 days	Mon 11/7/16	Wed 11/23/16		Roxana Mirshahvalad Hiba Jlilati	
18	ŧ	->	Determining the System Parameters	1 day	Mon 11/7/16	Mon 11/7/16		Obianuju C.Okafor	Obianuju C.Okafor
19	٠		Design of System	5 days	Tue 11/8/16	Mon 11/14/16	18	Hiba Jlilati	Hiba Jilati
20	•		Selection of the device to be used	2 days	Tue 11/15/16	Wed 11/16/16	19	Adama Isah Muhammad Roxana	🕍 Adama Isah Muhammad,Roxana Mirshahvalad
21			Material and Supplier Selection	2 days	Thu 11/17/16	Fri 11/18/16	20	Obianuju C.Okafor	🍆 Obianuju C.Okafor
22	•		Evaluation of System Design and Revisions	2 days	Mon 11/21/16	Tue 11/22/16	21	Hiba Jlilati	tiba Jillati
23	•	->	Development of System software	29 days	Wed 11/23/16	Mon 1/2/17		Adama Isah Muhammad Fatima Habib, Maha Sailan, Roy	
24		*	<ul> <li>concept for software development</li> </ul>	6 days	Wed 11/23/16	Wed 11/30/16			
25		->	System requirement	3 days	Wed 11/23/16	Fri 11/25/16		Obianuju C.Okafor	Obianuju C.Okafor
26	٠		Solution and research	3 days	Mon 11/28/16	Wed 11/30/16	25	Roxana Mirshahvalad	Terret Roxana Mirshahvalad
27	٠	*	Creating a Database	10 days	Thu 12/1/16	Wed 12/14/16		Fatima Habib, Maha Sailan	
28	٠	-	Classification & associated of DB	3 days	Thu 12/1/16	Mon 12/5/16		Fatima Habib, Maha Sailan, Adama Isah Muhammad	Fatima Habib, Maha Sailan, Adama Isah Muhammad
29	٠	-	Developmen of Inquiry module	3 days	Wed 12/7/16	Fri 12/9/16		Fatima Habib, Maha Sailan, Adama Isah	Fatima Habib, Maha Sailan, Adama Isah Muhammad
30	•	-,	Accuracy optimization studies	2 days	Tue 12/13/16	Wed 12/14/16		Fatima Habib, Maha Sailan, Adama Isah	Fatima Habib,Maha Sailan, Adama Isah
31		*	<ul> <li>Software development</li> </ul>	11 days	Thu 12/1/16	Thu 12/15/16			
32	<b>≡</b> †		Establishmer of the	2 days	Thu 12/1/16	Fri 12/2/16		Obianuju C.Okafor	-Obianuju-C.Okafor
33	<b>••</b>	-	Algorithm Modeling	2 days	Fri 12/2/16	Mon 12/5/16		Obianuju C.Okafor	Obianuju C.Okafor
34	<b>••</b>	=,	Create a System for Web service	2 days	Mon 12/5/16	Tue 12/6/16		Obianuju C.Okafor	Obianuju C.Okafor
35		-	Creation of DB connection between Web services	0 days	Tue 12/6/16	Tue 12/6/16	32,33,34	Fatima Habib, Maha Sailan, Adama Isah Muhammad	<b>12/6</b>
36		-,	User Interface Design and	4 days	Tue 12/6/16	Mon 12/12/16	35	Obianuju C.Okafor Roxana	Obianuju C.Okafor,Roxana Mirshahvalad
37	•		Creating User Reports received by the	2 days	Tue 12/13/16	Wed 12/14/16	36	Fatima Habib, Hazal Besmel, Hiba Jlilati, Maha Sailan,Obi	Fatima Habib,Hazal Besmel,Hiba Jiilati,

38	٠	*	✓ Software Integration	12 days	Fri 12/16/16	Mon 1/2/17		Hazal Besmel, Roxana	
39	٠		User interface	2 days	Fri 12/16/16	Mon 12/19/16		Roxana Mirshahvalad	Roxana Mirshahvalad
40	٠		User interface	1 day	Tue 12/20/16	Tue 12/20/16	39	Hazal Besmel	Hazal Besmel
41	٠		Establishmer of the	r 1 day	Wed 12/21/16	Wed 12/21/16	40	Adama Isah Muhammad	📥 Adama Isah Muhammad,Fatima Habib,Maha Sailan
42	۱.		Security and performance optimization	2 days	Thu 12/22/16	Fri 12/23/16	41	Hazal Besmel	Hazal Besmel
43	•		The creation of user	2 days	Mon 12/26/16	Tue 12/27/16		Fatima Habib, Hazal Besmel,Hi	Fatima Habib,Hazal Besmel,Hiba Jlilati,Maha Sailan,
44	٠		System Testing	4 days	Wed 12/28/16	Mon 1/2/17	43	Hazal Besmel	Hazal Besmel
45	٠	*	<ul> <li>Prototype Implementation and Test Study</li> </ul>	14 days	Tue 1/3/17	Fri 1/20/17		Hazal Besmel	
46	٠		Interface Tests	2 days	Tue 1/3/17	Wed 1/4/17		Hazal Besmel	Hazal Besmel
47	•		Mobile application testing	1 day	Thu 1/5/17	Thu 1/5/17	46	Hazal Besmel	tazal Besmel
48	•	-	Testing of database and application server	2 days	Fri 1/6/17	Mon 1/9/17	47	Hazal Besmel	Hazal Besmel
49	•		Testing on real users of the system	2 days	Tue 1/10/17	Wed 1/11/17	48	Hazal Besmel	Hazal Besmel
50	•	-,	Displaced by the Implementing Assessment and Testing	2 days	Thu 1/12/17	Fri 1/13/17	49	Hazal Besmel	Hazal Besmel
51	٠	-	Test Results Analysis and System Evaluation	2 days	Mon 1/16/17	Tue 1/17/17	50	Hazal Besmel	Hazal Besmel
52	•	-,	Establishing Standards Certification	2 days	Wed 1/18/17	Thu 1/19/17	51	Hazal Besmel	Hazal Besmel
53	٠		Completion of Improvements	1 day?	Fri 1/20/17	Fri 1/20/17	52	Hazal Besmel	Hazal Besmel
54			Project Closure	0 days	Fri 1/20/17	Fri 1/20/17	53	Hazal Besmel	♦ 1/20

### C.1.2 List of Work Packages

Work Package No	1
Work Package Name	Project Feasibility, Pre-Research (SRS-Feasibility stage) and Technological Feasibility
Start-End Date and Time	10/17/2016 - 11/07/2016
Related Organizations	

#### 1- List the activities of work packages.

#### 1.1 Project Process and Economic Feasibility:

- Determines whether the problems anticipated in user requirements are of high priority
- Determines whether the solution suggested by the software development team is acceptable
- Analyzes whether users will adapt to a new software
- Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.
- Cost incurred on software development to produce long-term gains for an organization
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis)
- Cost of hardware, software, development team, and training.

#### **1.2 Technological Feasibility:**

- Analyzes the technical skills and capabilities of the software development team members
- Determines whether the relevant technology is stable and established
- Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

#### 2- Describe the methods and parameters that will be used for work package.

In this work package the method is to have meeting with the doctors and the hospital staff and try to gather information about patients, how they make an appointment and the time table of doctors. Estimate the cost of the product and evaluate the possibility of building such software.

#### 3- List the experiments, tests and analysis in the work package.

- 1. Requirements elicitation
- 2. Requirements analysis
- 3. Use models for software cost estimation, like COCOMO

#### 4- List the output of work package and its success criterias.

#### Outputs:

Requirements gathered from the client.

#### Success Criterias:

- 1. Submit the requirments on time.
- 2. The requirments are agreed with the user expectation.
- 3. Cost is reasonable.

### 5- Explain the relation of output with other work packages

Good requirments specification allows us to start the design stage with out need to go back and change the requirments, and this save time and money.

Work Package No	2
Work Package Name	Online Hospital Appointment Based System Design Technology (SRS-design stage)
Start-End Date and Time	11/07/2016 - 11/30/2016
Related Organizations	

#### 1- List the activities of work packages.

- 1. Prepare the user requirments document (functional and non functional)
- 2. Prepare the system requirements document (functional and non functional)
- 3. Draw the UML diagrams such as Use Cases digram, sequence diagram, Class diagram, E-R diagram, Data Flow diagram and State chart diagram and etc.
- 4. Assign the recources to the project levels, distribute the task and determine the schedule
- 5. Determine the possible risks

#### 2- Describe the methods and parameters that will be used for work package.

- 1. Use ms project for assign the resources and and task distributation
- 2. Use IBM Rational for drawing UML diagrams

#### 3- List the experiments, tests and analysis in the work package.

- 1. Analyse user requirements
- 2. Analyse UML diagrams
- 3. Carry out acceptance test

#### 4- List the output of work package and its success criterias.

#### Outputs:

- 1. Work plan
- 2. Requirements
- 3. Uml diagrams
- 4. Assigned recources to each stage of the project

#### Success Criterias:

- 1. A good organized plan
- 2. Following the working plan

#### 5- Explain the relation of output with other work packages

Having a documented requirments, design procedure wil save the time and money and decrease the possibility of having errors in the next stages.

Work Package NameDevelopment of Online Hospital Appointment System Software, Creating a Data Base and Software Integration (SRS-Development	Work Package No	3
Stage)	Work Package Name	Development of Online Hospital Appointment System Software, Creating a Data Base and Software Integration (SRS-Development Stage)
Start-End Date and Time         12/01/2016 - 01/02/2017	Start-End Date and Time	12/01/2016 - 01/02/2017
Related Organizations	Related Organizations	

#### 1- List the activities of work packages.

- 1. Design User interface
- 2. Design the database
- 3. Implement functionalities of the website. Such as, login, logout, reserve and etc.
- 4. Integrate different parts of the software

#### 2- Describe the methods and parameters that will be used for work package.

To develop this system we are going to use a programming languages like:

- 1. HTML(Hyper Text Mark –up language ) for overall structure.
- 2. CSS (Cascade Style Sheet) to give the website a nice appearance.
- 3. JavaScript, Ajax to implement most of the functions.
- 4. PHP (Hyper Text Preprocessor ) to connect the site to database

#### 3- List the experiments, tests and analysis in the work package.

Smoke test to check the critical functionalities

#### 4- List the output of work package and its success criterias.

#### **Outputs:**

- 1. User Interface Design is completed
- 2. Data base is completed
- 3. Main functions of website is working ,which is reservation function know user can sign up and log in and reserve an appoinment with the available doctor and in the available time
- 4. Different parts of the software working together correctly

#### **Success Criterias:**

Implementation of the UI, databse , website functions will be finished on time according to the work plan

#### 5- Explain the relation of output with other work packages

Accurate implementation will be useful in testing phase. As much as we the implementation is more accurate and correct the probibility of failure in our website will be reduced and the time and cost for maintenance of the website will be much lower.

Work Package No	4
Work Package Name	Prototype Implementation and Test Study and Maintanance (SRS-
	Test & Maintanance stage)
Start-End Date and Time	01/03/2017 – 01/20/2017
Related Organizations	

#### 1- List the activities of work packages.

- 1. Integration test
- 2. System testing : Non-functional requirments
  - Performance Testing
  - Security Testing
  - Usability Testing
  - Reliability and Dependability Testing
  - Endurance testing
  - Load testing
  - Localization testing and Internationalization testing
  - Ergonomics Testing
  - Operational Readiness Testing
  - Installation Testing
  - Configuration Testing
  - Compatibility Testing
  - Interoperability Testing
  - Maintainability Testing
  - Availability Testing
  - Recoverability Testing
  - Miscellaneous Testing
- 3. Acceptance test
- 4. Maintance test
- 5. Deploy the website

#### 2- Describe the methods and parameters that will be used for work package.

- 1. Acceptance test = carry out by user
- 2. System testing = carry out by tester
- 3. Maintance test = carry out by tester
- 4. Deploy the website:
  - Amazon webservice
  - Fire Zilla
  - Name cheap.

#### 3- List the experiments, tests and analysis in the work package.

All this work package about testing and make sure that the web site is met the user requirments by applying several tests:

- 1. Integration test.
- 2. System testing.
- 3. Acceptence test.
- 4. Maintance test.

#### 4- List the output of work package and its success criterias.

#### Outputs:

Teh website is ready to use and it is available on the web servere.

#### Success Criterias:

- 1. The wbsite is reflect the user requirments.
- 2. All functions of the website is working perfectly .

#### 5- Explain the relation of output with other work packages

There will be no work package left after this work package is done.

	Description of Output	Expected Time Interval
Example:	Feasibility Studies	01.07.2014 - 30.09.2014
1	Project Process and Technological Feasibility	10/17/2016 - 11/07/2016
2	Design	11/07/2016 - 11/30/2016
3	Software development, Creating a Database and	12/01/2016 - 01/02/2016
	Software Integration	
4	Prototype Implementation and Test Study	01/03/2017 - 01/20/2017

### C.1.3 List of Milestones (should be matched in the gantt chart)

### C.1.4 List of Risks (see below example, search other risks.)

Risk	Probability	Effects	Your Strategy
The time required to develop the software is underestimated.	High	Serious	Implement the most important requirements and ask from customer for extra time to complete the software completely.
Software tools cannot work together in an integrated way.	High	Tolerable	Change the software tools and buy the ones that are compatible with each other.
Customers fail to understand the impact of requirements changes.	Moderate	Tolerable	Manager should keep in touch with the customer constantly while preparing the requirements specification document to ensure that all necessary requirements will recognize correctly
The rate of defect repair is underestimated.	Moderate	Tolerable	Replace potentially defective components with more reliable bought-in components.
The size of the software is underestimated.	High	Serious	Investigate buying sw components; Investigate use of a program generator.
Code generated by code generation tools is inefficient.	Moderate	Insignificant	Change the code generator tools and buy a more reliable one.
Key staff are ill at critical times in the project.	Moderate	Serious	Reorganize team so that there is more overlap of work and people therefore understand each other's jobs.
The database used in the system cannot process as many transactions per second as expected.	Moderate	Serious	Investigate the possibility of buying a higher-performance database.
Reusable software components contain defects that mean they cannot be reused as planned	Moderate	Serious	Reusable software components have to be repaired before these components are reused; Use the parts that work correctly and change the parts that contain defects.

Required training for staff is not available.	Moderate	Tolerable	Manager prepare learning resources for the staff to start learning by themselves and ask their questions from experienced staff; manager itself has control over the learning process
Organizational financial problems force reductions in the project budget.	Low	Catastrophic	Remove unnecessary parts from the project; Reduce number of staff working on project.
Changes to requirements that require major design rework are proposed	Moderate	Serious	Change current requirements in a way that we can support new requirements which leads to a minor design change; Instead of changing current requirements add new requirements to the current requirements.

# C.2 Project Management and Organization

### C.2.1 Project Team

Personnel Name	Title	ID/Passport No	Education Status	Graduation Date	Date of Starting Work	ldea Own er
Obianuju C. Okafor	Manager/ Programmer	128423	Phd.	2012	10/17/16	yes
Hazal Besmel	Tester	124630	Phd.	2011	10/17/16	
Adama Isah Muhammad	Data Base Developer	138201	Bsc.	2011	10/17/16	
Maha Sailan	Data Base Developer	139162	Msc.	2013	10/17/16	
Fatima Habib	Data Base Developer	139250	Bsc.	2013	10/17/16	
Roxana Mirshahvalad	User Interface Designer	149029	Msc.	2014	10/17/16	
Hiba Jlilati	Analyst	15701015	Msc.	2015	10/17/16	

### **C.2.2 Organization Scheme**



# D.1 Economic Forecasts

#### 1- Evaluate the commercialization potential of project outcomes. List possible risks here?

The process of commercialization is broken into phases. The initial phase is introduction of the product into the market. Since our product has a level of public value that results in overall profitability we can pass this phase successfully. Then we need to bring the product into the market and we need advertising efforts to bring awareness of the product to consumers in the target marke and because we are working for a university that has its own hospital we start using product in university's hospital and start our advertising to introduce to other hospitals and patients as well. At the end our product is known to all local people and hospitals.

2- List your expectations to your company which are come by your project							
Time-to-market (month):	2 months						
The expected increase in sales revenue (%):	40%						
The expected increase in market share (%):	70%						
Time to start to gain:	4 months after realse						

# **D.2** National Outcomes

1- Specify the output that may be subject to patent, utility model and industrial design registration in the project.

Since the output of our product is a minor invention, which means there are such systems all around the world but there is not any in Cyprus, and it has an important role in a local innovation system our project subjects to utility model.

2- Explain the potential of project and its outputs that may have an effect on social life, education, health and etc.

The output of our project has an effect on social life as well as on health. It affects on social life in a way that it helps the patients of a society to easily make appointments with their desiers doctors and save their time while they are making appointments. Also it helps doctors to easily manage their patients and their appointments. So this leads to a better health care system.

3- Explain the positive and negative effects of project outputs for environment and human being.

#### **Positive effects:**

- 1. Save time
- 2. Manageable appointment time table
- 3. Increase the income of doctors
- 4. Enhance health care system

#### Negative effects:

- 1. If the system crashes it gets difficult to control the appointments
- 2. System is working with electricity so in the case of power failure patients could not reserve appointments and doctors could not manage appointments

# (M013) Instrument / Equipment / Software / RELEASE PURCHASES

Proje	ect Name									
Line	Instrument / Equipment / Soft	ent / No. nt / Software of		Technical	Purpose of Project	Post-Proje / P	ct Place of Use urpose	Unit Price (USD)	Unit Price (TL)	Total Amount (TL)
	/ Publication Nar	ne Item		specification	Activities	R & D	Production	(050)		()
1	Eclipse	1		Java- based open source platfor m	To create a customized development environment (IDE)		v			-
2	Aptana Studio	1		open source development tool for the open web	For building, editing, previewing and debugging HTML, CSS and JavaScript websites		V			-
3	MySQL, PhpMyAdmin	1		open-source relational dat abase manag ement system	To create a database		<b>v</b>	5,000	15405.75	15405.75

4	FireZilla	1		cross- platform FTP application	For transferring files over the Internet.	~	-	-	-
5	MS Project	1		project mana gement software	To assist in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads.	✓	589.99	1817.85	1817.85
6	IBM RATIONAL ROSE tool	1	400 MB	An object- oriented Unif ied Modeling Language	To create the SRS document and UML diagrams for our project	✓	-	-	-
7	Name cheap	1		Domain Manager	To set up our domain	V	10.29	31.71	31.71

8	Amazon Web services	1	cloud computing	The flexibility to launch our application regardless of our use case or industry.	✓	603	1859.47	1859.47
							TOTAL	19,114.78 TL

# (M030) Quarterly Estimated Cost Form (TL)

Project Name :					
	20	TOTAL	TOTAL COST RATE OF		
Cost Item	I	II	(TL)	CONTENTS (%)	
Personnel	44500 TL	44500 TL	89000 TL	52.01 %	
Travel	3000 TL	3000 TL	6000 TL	3.51 %	
Instrument / Equipment / Software / Publications	19,114.78 TL	0 TL	19,114.78 TL	11.17 %	
Domestic Works Made By R & D and Testing Institutions	0 TL	0 TL	0 TL	0 %	
International Works Made By R & D and Testing Institutions	0 TL	0 TL	0 TL	0 %	
Domestic Services Procurement	15000 TL	15000 TL	30000 TL	17.53 %	
Overseas Service Procurement	12000 TL	0 TL	12000 TL	7.01 %	
Material	10000 TL	5000 TL	15000 TL	8.77 %	
TOTAL COST	103614.78 TL	67500 TL	171114,78 TL	100 %	
CUMULATIVE COST				100	
	IN THE PR	OJECT TOTAL MAN-MONTH	2700 TL		

# APPENDIX