

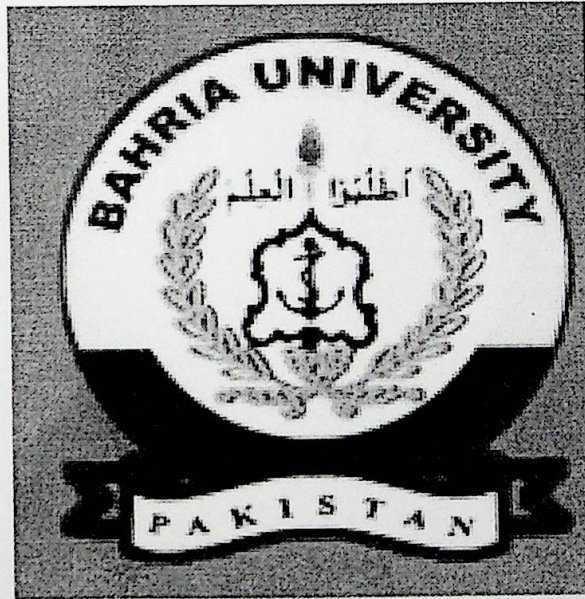
# ONLINE PATIENT APPOINTMENT SYSTEM (AN EASY WAY TO GET AN APPOINTMENT)

By

**Ayesha Jamshed**

133002-011

(2000-2003)



Supervised By

**Mr. Azher Kaleem**

A report submitted to the department of Computer Science.  
**Bahria Institute of Management and Computer Science, Islamabad**

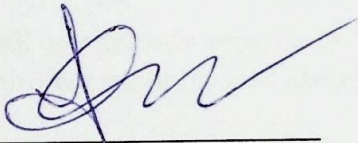
In partial fulfillment of the requirement of the degree of  
**Bachelor Of Computer Science**

## DEDICATION

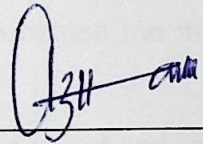
To my mother and my siblings who supported me not only in my studies but also in all aspects of life.

## CERTIFICATE

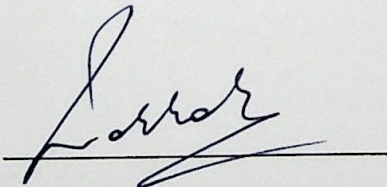
We accept the work contained in this report as conforming to the required standard for the partial fulfillment of the degree of BCS in the subject of Computer Science



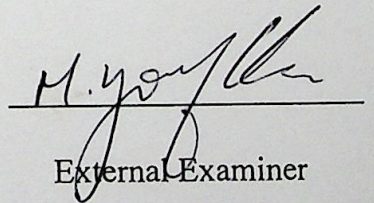
Mr. Fazal Wahab  
(Head of Department)



Mr. Azher Kaleem  
(Supervisor)



Internal Examiner



External Examiner

## ACKNOWLEDGEMENT

First and foremost I would like to very humbly submit my sincere and profound gratitude to Allah, the Almighty, for providing me the strength, capacity and guidance to complete this project.

To start with I would like to submit it very openly that the debt I owe to my kind supervisor Sir. Azher Kaleem who kept my spirits high by his suggestions and appreciation. He was available to me whenever and for whatever I consulted for. Without his precious guidance and help I could never be able to develop such a project.

To all my friends especially Mr. Imran Abdul Baset, who helped me in improving the project modules and usability, by their fine implications.

And last but not the least; I would like to acknowledge the support and efforts of my mother. I would like to admit that I owe all my achievements to truly, sincere and most loving mother, who mean the most to me, and whose prayers are a source of determination for me.

## PROJECT SUMMARY

<u>Project Title:</u>	Online Patient Appointment System
<u>Objectives:</u>	This software is designed to allow patients to take online appointments and doctors can have an access to their patient's information any time at any place.
<u>Under Taken:</u>	Miss. Ayesha Jamshed
<u>Supervised By:</u>	Mr. Azher Kaleem
<u>Submitted As:</u>	Bachelor Of Computer Science
<u>Operating System:</u>	Windows 2000/98
<u>Server:</u>	IIS (Internet information services) for windows2000 and PWS (Personal Web Server for 98)
<u>Database:</u>	MS.ACCESS
<u>Programming Language:</u>	HTML, ASP

## ABSTRACT

The Online Appointment System allows patients to view clinic appointment availability over the Internet. Patients can schedule and cancel appointments through a web browser from home or work 24 hours a day 7 days a week. Contact is not needed with the clinic prior to arriving for the appointment.

A significant benefit the system provides is a method to survey the patients by sending feedback forms via e-mail. Results are tabulated dynamically; on runtime multiple patients' information is processed and can be viewed by clinic staff on a secured Internet site. E-mail feedback forms allow rapid resolution of problems and save patients time completing the forms. With automated tabulation, no human effort is needed to score and view the results.

The patient's e-mail address is utilized to send appointment reminders. Patients also benefit from the "Appointment Cancellation Notification." Patients have the option of adding their name to a mailing list that will automatically send e-mail to them when an appointment has been cancelled. Included with the e-mail is a link to the online appointment system. This practice permits the patient to book an appointment within seconds of an appointment being cancelled. The system is also beneficial to the staff because it allows the technicians to focus on other duties of the job.

The online database is updated as the staff Administrator daily opens appointments. An ad-hoc report listing all the appointments is generated. This report is pasted into a text box on the web page. Administrator performs maintenance on the system through the "Online Appointment Desk" secure web page. This page allows technicians to cancel, add and delete appointments; send feedback and e-mail reminders; and view a daily roster of patients. The appointments scheduled via the online system must be entered. Technicians through the "Online Appointment Desk" secure web page print a list of appointments. This list is used to enter information into Clinic main database.

Most importantly I have tried to create a System, which is easy for Staff members to operate. Many of the Staff who will be using the system will have little or no computer experience. As a result this system consists of many well laid out and self-explanatory forms containing both text fields and drop down menus.

New staff members/ Administrators can be easily registered to the system and a username and password is then sent to their clinic email address. More over administrators are also provided the functionality to view the patient information in XML format to send to Clinic management system & also in excel whose functionality is imported in the web browser.

---

 Table Of Contents
 

---

DECLARATION	I
ACKNOWLEDGEMENT	II
PROJECT SUMMARY	IV
ABSTRACT	V
<b>CHAPTER NO.1</b>	<b>INTRODUCTION</b>
1.1 PROJECT BACKGROUND	2
1.2 PROBLEMS THE PROJECT IS DESIGNED TO ADDRESS	2
1.3 PROJECT MODULES	2
1.2.1 FUNCTIONALITY OF MODULES	3
1.4 PROJECT SCOPE	4
1.5 USING THE WEB INSTEAD OF A WINDOW SYSTEM	6
<b>CHAPTER.NO 2</b>	<b>LITERATURE SURVEY</b>
2.1 OVERVIEW OF THE TOOLS USED	8
2.1.1 ASP (ACTIVE SERVER PAGES)	8
2.2 DATABASE AT THE BACKEND	12
2.2.1 MS ACCESS	13
<b>CHAPTER NO.3</b>	<b>EXISTING SYSTEM</b>
3.1 EXISTING SYSTEM	15
3.2 DRAWBACKS IN THE CURRENT SYSTEM	15
3.3 SOLUTION PROVIDED	16

<b>CHAPTER NO.4</b>	<b>PROPOSED SYSTEM</b>	
4.1 PROPOSED SYSTEM		18
4.2 STEPS IN DEVELOPING THE SYSTEM		18
4.3 ADVANTAGES OF PROPOSED SYSTEM		18
<b>CHAPTER NO.5</b>	<b>SYSTEM DESIGN</b>	
5.1 SYSTEM DESIGN		22
5.2 PURPOSES AND SCOPE		22
5.3 FUNCTION ORIENTED DESIGN		22
5.4 OBJECT ORIENTED DESIGN		23
5.4.1 DATA FLOW DIAGRAMS (DFDS)		24
5.5 DATABASE		32
5.6 DATA DICTIONARY		33
<b>CHAPTER NO 6</b>	<b>TESTING</b>	
6.1 TESTING		37
6.2 SOFTWARE EVALUATION		37
6.3 UPDATING INFORMATION IN DATABASE		38
6.4 INFORMATION RETRIEVAL		38
6.5 SAFETY REQUIREMENTS		39
6.6 SECURITY REQUIREMENTS		39
6.7 SYSTEM QUALITY ATTRIBUTES		39
6.8 IMPLEMENTATION		40
6.9 BACKUPS		40
6.10 RECOVERY STRATEGIES		42



<b>FUTURE ENHANCEMENTS</b>		43
<b>APPENDICES</b>		
APPENDIX A	User Manual	46
BIBLIOGRAPHY		77

CHAPTER NO.1  
INTRODUCTION