Chapter 7
Mobile-Based Appointment System for Remote Patients

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ABSTRACT

Healthcare is a basic human need in any civilization. In modern sense of geopolitics, a welfare state has to ensure easy access of public to basic amenities which include medical facilities. However, the areas, off mainland, usually stay deprived of quality medical services. This is generally the case in third world countries, including Pakistan. Here, due to lack of education and poverty, the suburban or countryside population remains ignorant of available qualified doctors. Everybody does not afford travelling to the nearest main city hospital. Those who afford sometimes experience extreme frustration at absence of their desired medic. In order to assist the deprived, the authors have developed a mobile-based appointment system for remote patients. This application not only helps in requesting appointments with doctors, but lets the android mobile user search the list of quality medics around. The details related to the use and effectiveness of this application have been discussed in the main chapter.

INTRODUCTION

With the increase in environmental pollution, global warming and depleting ozone layer, a steady, though bizarre by nature, surge in diseases has taken the world by storm. Human immunodeficiency virus (HIV), HBS, HCV and Nipah virus...
(bat borne viral disease) are some of the very modern yet highly lethal infections that have overwhelmingly hit the peoples in different parts of the world, further intensifying need for specialized physicians. To make the matters worse, there are some developing or underdeveloped countries where, barring the residents of main cities, people have nil or limited access to medical facilities. The quality of these healthcare services is also difficult to endorse given the low check and balance mechanism from competent authorities. The situation is not any different in Pakistan.

Sometimes, the geographic make of a land also makes it difficult to provide a comprehensive quality healthcare service in the area, e.g., the northern areas as well as many interior parts of Pakistan in Khyberpakhtunkhwa, Balochistan, Sindh, Punjab and Gilgit-Baltistaan. In Pakistan, people living on the outskirts of main cities or even farther off need handsome amount of money to travel to main cities and avail quality specialized health facilities. Unfortunately, only the healthcare facilities situated in major cities array enough sufficient specialist physicians and technological support to handle any kind of emergency. Many times the patients and their families who travel long distances to utilize quality health service are met with disappointment in the form of absence of their desired medic who may be a specialist or general physician. Most of the patients in Afghanistan cross the border to visit hospitals in Pakistan, and they face similar problems along with the travel issues.

In order to avert this kind of frustration that proves heavy on one’s time, energy and pocket, our mobile application, an app easily downloadable in android mobile phones, easifies search for a doctor and scheduling an appointment with them. It is a perfectly user-friendly plus humanitarian app that has been designed specially to facilitate smooth interaction between a patient and a doctor. It lets the patient search doctors in their area/city, book appointments with few clicks, find location/directions on the map, using a smart phone or mobile phone. This mobile application is not only for patients but for doctors as well. It works like a paperless way for scheduling appointments online. The doctors can check and manage all present and/or future’s appointments.

CURRENT HEALTH SCENARIO OF PAKISTAN

Referring to Gallup Survey Pakistan, Hamza Afzal Butt, Digital Marketing Manager at Bilqees Sarwar Foundation, maintains that the out of total GDP of Pakistan only 0.75% is invested in health, a budget far from enough to cater for healthcare demands of 1.8 billion people (Butt, 2017). Testifying to this claim, Nadir Baloch spotlights the official data that confirm the presence of 127,859 doctors and 12,804 health facilities in the country to cater for over 170 million people (Butt, 2017).
Tangible User Interfaces as Mediating Tools within Adaptive Educational Environments
www.igi-global.com/chapter/tangible-user-interfaces-mediating-tools/22322?camid=4v1a