MOBILE APP FOR CARDIAC RISKS

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ABSTRACT

Expedient development of mobile phones and tablets with momentous processing power and memory storage has developed a passionate in today's professional world and the mobile competence is gradually making inroads into the scientific and healthcare computing to understand medical and technical jargons for the efficient application. The contemporary trend of handy devices is emphasizing more on usage of portable personal devices rather than health monitoring schemes from the hospital. The development of Mobile apps (software for mobile devices) in succession with scientific applications continue to develop more in number with diversity and capability. Studies forecast that the data transmission of health parameters to physicians will gain more importance as it would convalesce the Doctor-Patient interactions.

Cardiac Risks now updated as Cardiac Health, is an android app developed by us and hosted in Google Play store. It is an awareness app for preliminary assessment of heart diseases which was designed to discriminate cardiac associated problems or other ailments. This is a unique app to spread awareness of cardiac risks using mobile technology to both public and medical professionals. Future scope of the work includes increasing the cardiology diseases and integrating map for the users to find their nearest hospital.

Key words: Mobile App; Cardiac Health, Google Play Store, Software.

1. INTRODUCTION

Mobile Android apps (software for mobile devices) in succession with scientific applications endure more in number with diversity and capability. Studies forecast that the data transmission of health parameters to physicians will gain more importance as it would improve the Doctor-Patient interactions. Cardiac Risks now updated as Cardiac Health, is an android app developed by us and hosted in Google Play store. It is an awareness app for preliminary assessment of heart diseases which was designed to discriminate cardiac associated problems or other ailments. Signs & symptoms for cardiac risks are listed pictorially, which is mapped to four major cardiology diseases namely Coronary heart disease, Valvular heart disease, Myocardial diseases and Heart failure. The risk factors, treatment modalities, prevention and homemade remedies for each of the cardiology diseases are given as lucid pictures. A BMI calculator is also an integral part of the app which helps in calculating body mass index based on height and weight that applies to both adult men and women. It provides information about First Aid using video under the courtesy of Sri Ramachandra Medical College doctors. For drug dosage and treatment, users are advised to consult their physician.

2. METHODOLOGY

The mobile app was developed in Android Studio1.5 using Software Development Kit with the Android minimum required version (3.0) to a higher end version (7.0) and Google Application Programming Interface with HAXM hardware configuration. Empty Activity layout was taken to develop layouts where in four major layouts and several sub-layers were interlinked using JavaScript with XML was employed for scripting activity layout in Android Studio. Videos were created and uploaded with the help of youtube.

3. RESULTS AND DISCUSSION

Signs & symptoms for cardiac risks are listed pictorially, which mapped to four major cardiology diseases namely Coronary heart diseases, Valvular heart diseases, Heart failure, and Myocardial diseases. The risk factors, treatment modalities, prevention and homemade remedies for each of the cardiology diseases are given as lucid pictures. A BMI calculator is also an integral part of the app which helps in calculating body mass index based on height and weight that applies to both adult men and women. It provides information about first aid video under the courtesy of YouTube and lifestyle changes which is an outcome of interactions with renowned cardiologist. For drug dosage and treatment, users are advised to consult their physician.

4. FIGURES

FLOW DIAGRAM
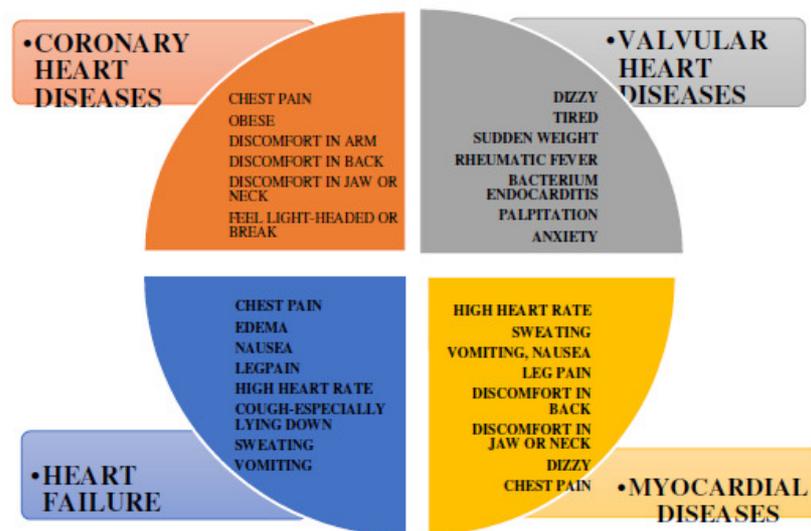
Figure 1 Signs & symptoms for cardiac risks mapped to four major cardiology diseases

Figure 2 Layouts for Coronary Heart Disease as screenshot

CONCLUSION AND FUTURE SCOPE

The app is unique of its kind to spread awareness of cardiac risks using mobile technology to both public and medical professions. Future Scope of the work includes increasing the cardiology diseases and integrating map for the users to find their nearest hospitals.

ACKNOWLEDGEMENTS

sincere thanks to the faculty of Biomedical Sciences Department for their constant support and encouragement

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