AndroidX

A Computer Science Project



by

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Acknowledgment

I am humbled to have successfully completed this project and am indebted to all those who have helped me even in the smallest of roles.

I would like to express my deep gratitude to my computer science teacher, Mr. Amit Dua, who gave me the guidance and the resources to pursue this thought-provoking project. I am grateful to him for always being willing to hear out my ideas and for correcting me whenever I was wrong, so that I could strive towards perpetual improvement in my scientific acumen.

Lastly, any attempt at completing this project would have been in vain without the undivided support and encouragement of my parents and my friends who appreciated me for my work without ever doubting my capabilities.

Aman Arora

Certificate

This is to certify that **Aman Arora**, a student of class XII-D of Delhi Public School, Dwarka, has successfully completed the project on the mentioned topic under the guidance of Mr. Amit Dua during the session 2015-16 as a partial fulfilment of the computer science practical examination as mandated by the Central Board of Secondary Education.

Mr. Amit Dua

Subject Teacher

Introduction

With increasing data, it is becoming more and more important to store information in an efficient and accessible manner. AndroidX is a rudimentary program developed in C++ (using Turbo C++) to fulfil this very requirement for dealers of Android mobile phones.

Apart from just storing the required information (about models, software versions, prices and stocks), it provides a user-friendly interface and a partially secure environment for both the company officials and the users to access and manage their information.

The company officials have the option to add and remove products after providing valid login credentials. They can also manage purchases and orders outside the software. As customers often prefer the cheapest phones or phones with the latest Android Version, the company officials have the option to keep track of the device details.

Further, users can utilise the menu-driven interface to view ordered lists of products along with details such as Android Versions, stocks, prices and codenames. Once selected, the products can be purchases through an automatically generated invoice. The user accounts also help the company to manage guarantee and warranty considerations.

All in all, a program like AndroidX is a must-have for optimal functioning of a mobile store.

The Source Code

Written on Turbo C++

Screenshots

Real Run-throughs of the Program

Future Scope

With the growth of information technology, our population, and hence the amount of data each applicable program needs to store, there is always scope for improvement and optimisation.

The following provisions could be incorporated in future versions of our program:

- Link C++ with a MySQL database to avoid data-redundancy and discrepancies across different stores
- Make data storage more secure with stronger encryption
- Make OTP (one-time password) more secure
- Introduce a backup facility for all records
- Allow customers to buy multiple items in one transaction
- Make provisions for different levels for customers, including a potential reward-point system for bulk-buyers
- Provide different rights to different company officials, setting up a hierarchy of control
- Expand to other platforms and superior languages
- Increase sorting efficiency with more efficient algorithms