

CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 33

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Project Description

The application is a database of computer hardware parts. The application will provide a platform for users to browse through and select PC components for building custom computers. They will be able to search for specific parts, compare various options and check for intercompatibility between components.

The computer hardware parts will be modeled with a database to store and see if they are compatible with each other. Furthermore, the user can filter the pc hardware to see if they fit the requirements that they are looking for. When users add parts to their parts list, the remaining components that are required will narrow down to show compatible combinations or provide warnings for incompatible parts.

Database Specifications

The main functionality of the database in this project will be to store, retrieve, and sort through information on user information, as well as a variety of computer parts, and configurations. The entities will be made up of the User, their login information, as well as their custom PC configurations. This will include different types of computer parts, such as CPU, GPU, motherboard, power supply, RAM and others. They will include attributes to help users with their purchase decisions, such as model name, performance metrics, power requirements, dimensions and other relevant information. The database will store information about compatibility between different components, ensuring that a user can select a list of compatible parts for their PC build. The database will also allow users to create and store their custom configurations.

Description of Application Platform

The project will use Java as the primary programming language and JDBC to interact with the Oracle database.

Comments

The ER diagram for this project uses an aggregation of relationships between all the necessary PC components and the Configuration entity. The ER diagram does not capture the relationship between the CPU and GPU, as a GPU is not strictly necessary for the computer to function if the CPU comes with integrated graphics. We are assuming this app targets gamers and consumers that are likely to need discrete graphics, so users will be required to choose a GPU as part as the computer. Some aspects are also not entirely accurate to real life, as the ER diagram shows the power supply connected only to the motherboard for simplicity, whereas it would be connected to many components in real life (storage, GPU, CPU, etc.).

