University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 1

Date: February 9, 2024

Group Number: 36

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Wendy Li	38036695	lwqz	wendyli.org@gmail.com
Antonia Tykei	82340886	atykei	antoniatykei@gmail.com
Wendy Tso	34159368	wendytso	wendywktso@gmail.com

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

University of British Columbia, Vancouver
Department of Computer Science

1. ***Project Description:***

Answering the following questions:

a. ***What is the domain of the application? Describe it.***
The domain of an application refers to the area of knowledge your application resides in. For example, if I am making an application for a hospital, the domain would be something like healthcare/patient management/logistics (it would depend on what the application is trying to do).

The domain of this project is mechanical keyboard customization. Putting together and building a mechanical keyboard requires many different components that interact and combine in different ways to allow users to create and organize their own mechanical keyboards. This domain encompasses various aspects related to mechanical keyboards including keyboard brands, models, switch types, keycaps, materials, layouts and other customization options. By managing data related to keyboard customization, this application can help users make informed decisions about their keyboard customization projects and modifications.

b. ***What aspects of the domain are modeled by the database? In answering this question, you will want to talk about what your project is trying to address and how it fits within the domain. It is likely that in the process of answering these questions you will bring up examples of a real-life situation that the application could be applied to.***

This comprehensive database is designed for mechanical keyboard enthusiasts, hobbyists, beginners, and professionals. The database will serve as a shared informational platform where users can document their ideas or existing keyboard designs, share them with their peers and also discover and be inspired by other user's customizations. The database will models various aspects of mechanical keyboard customization. Users can keep track and organize their builds and components while also being able to share this with the community.

3. Database specifications: (3-5 sentences)

a. ***What functionality will the database provide? I.e., what kinds of things will people using the database be able to do.***

The database enables users to **create, add and share** customized keyboard instances, documenting their designs, keyboard components used, and modifications. Users can **modify** relationships between entities, such as keyboard models, switches, and keycap sets to tailor their configurations. The database serves as a collaborative platform where users can **explore**

and view keyboards shared by others. Users can **add feedback** on shared keyboards, fostering community interaction. The database also allows users to **search and filter** through shared keyboards based on specific criteria.

4. Description of the application platform: (2-3 sentences)

a. ***What database will your project use (department provided Oracle, MySQL, etc.)? See the "Project Platforms" section of this document for more information.***

The project will use Oracle Database Management System which provides a scalable platform for storing and managing data related to mechanical keyboard models, switches, keycap sets, user profiles, among others.

b. ***What is your expected application technology stack (i.e., what programming languages and libraries do you want to use)? See the "Project Platforms" section of this document for more information.***

   i. ***You can change/adjust your tech stack later as you learn more about how to get started for the project via latter tutorials.***

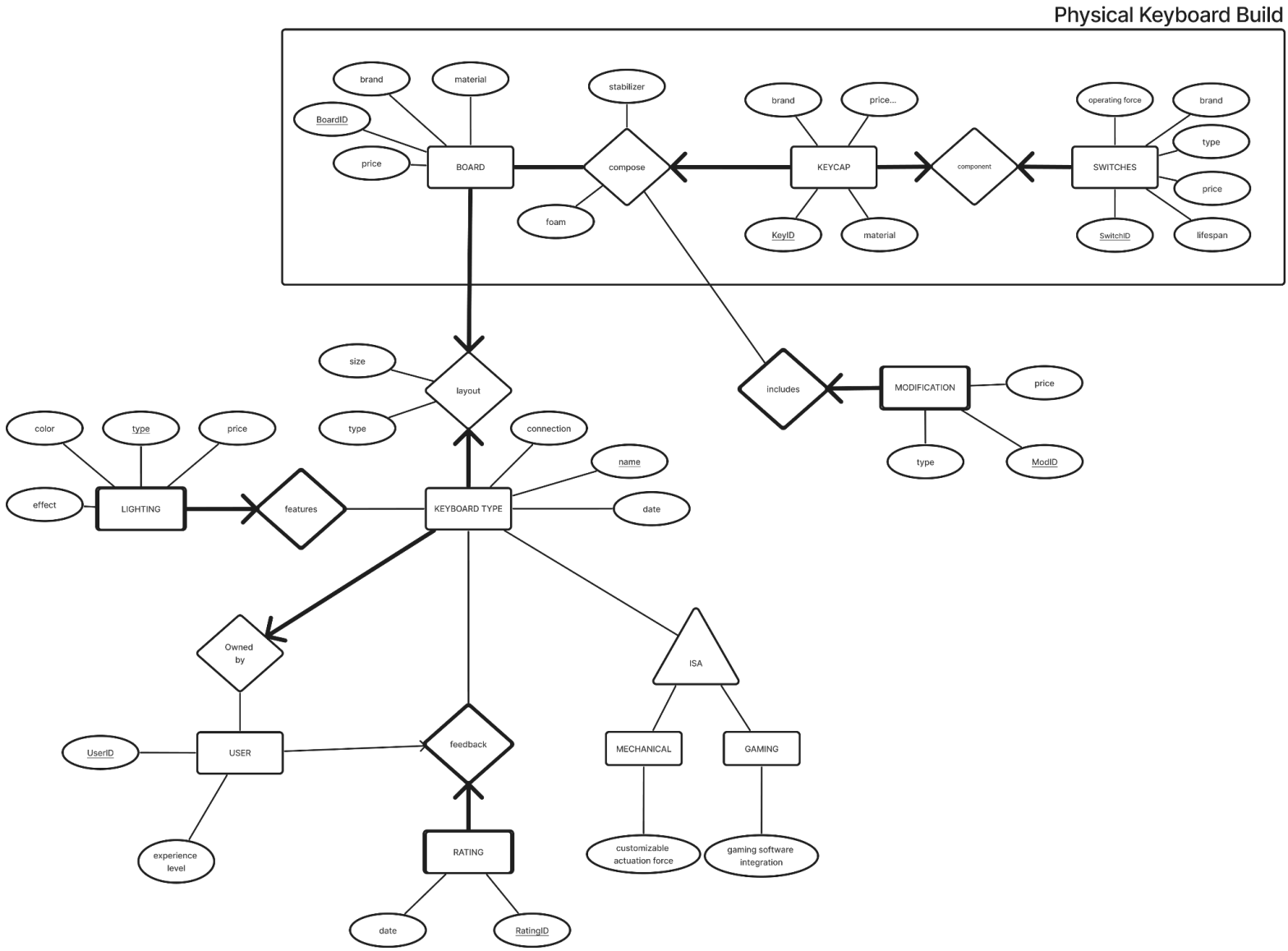
The expected application technology stack includes Oracle, as well as PHP and Java as the primary programming language which will facilitate the backend development. Additionally, React framework and CSS programming language will be used for front-end development to stylize and provide structure to the interface.

5. An ER diagram for the database that your application will use. It is OK to hand-draw it but if it is illegible or messy or confusing, marks will be taken off. You can use software to draw your diagram (e.g., draw.io, GoogleDraw, Microsoft Visio, Powerpoint, Gliffy, etc.) The result should be a legible PDF or PNG document. Note that your ER diagram must use the conventions from the textbook and the lectures. For example, do not use crow's feet notation or notation from other textbooks).

a. ***Please limit your diagram to a letter size page (8.5 x 11 inches). If you require additional space, talk to your project mentor beforehand as this might mean that your project is a bit more complicated than what we expect.***

University of British Columbia, Vancouver

Department of Computer Science



7. Other comments, as appropriate, to explain your project.