UNIVERSITY OF Baguio

SCHOOL OF INFORMATION TECHNOLOGY

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INTRODUCTION TO APPLICATION DEVELOPMENT 1
1st Semester SY 2024-2025
First Grading Examination

SCORE

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Course and Year: BSCS 2nd year   Section: IAB1

GENERAL INSTRUCTIONS
1.   Use only the indicated framework/library for creating the web application.
2.   Mind your own test papers. Anyone caught cheating will automatically be given a 0 in his/her test, suspended or expelled as stated in the Students Handbook, Article XIII Section 1Bc.
3.   Turn off ALL gadgets.
4.   If there are any questions or concerns, approach the proctor/instructor.

I. Application Development. Read and follow the instructions/specifications below carefully. Use the JavaScript scripting library and ReactJS library to create the application below as indicated per item. 20 points each.

Rubrics:

	40% of the points	60% of the points	80% of the points	100% of the points
Coding Standards 10 points	No name, date or assignment title included. Poor use of whitespace (indentation, blank, lines) Disorganized and messy Poor use of variables(many global variables, ambiguous naming)	Includes name, date, and assignment title. White space makes program fairly easy to read. Organized Work Good use of variables.	Includes name, date and assignment title. Good use of whitespace. Organized work. Good use of variables (no global variables, unambiguous naming).	Includes name, data and assignment title. Excellent use of variables (no global variables, unambiguous naming) Excellent use of white space. Creatively organized work.
Runtime 20 points	Does not execute due to errors. User prompts are misleading or nonexisted. No testing has been completed or no input validation.	Executes without errors. User prompts contain little information, poor design. Some testing or input validation has been completed.	Executes without errors. User prompts are understandable, minimum use of symbols or spacing in output. Most testing or input validation completed.	Executes without errors, excellent user prompts, good use of symbols, spacing in output. Thorough and organized testing or input validation has been completed.
Efficiency 10 points	A difficult to understand and inefficient solution. Code is huge and appears to be patched together.	A logical solution that is easy to follow but it is not the most efficient.	The code is fairly efficient without sacrificing readability and understanding.	Solution is efficient, easy to understand and maintain.

1.   Suppose you are a Keyboard Manufacturer (Create a name for your company) and you are trying to showcase your Keyboard Documentation in the form of a Web Application using the **React JavaScript Library**. You are showcasing two (2) keyboards manufactured by your company. The first model is the **KB-X1000**. Create a ReactJS Web Application using **props, functional components and the React/JavaScript template using Vite** to showcase the keyboard documentation listed below:

Keyboard Documentation:

Model: KB X1000

Product Overview - The KB-X1000 is a high-performance mechanical keyboard designed for gamers, professionals, and everyday users who demand precision and comfort. It features customizable RGB backlighting, durable mechanical switches, and programmable keys to enhance your typing and gaming experience.

Specifications:

- **Switch Type:** Cherry MX Red (Mechanical)
- **Key Layout:** Full-size (104 keys)
- **Backlighting:** RGB with customizable colors
- **Connectivity:** Wired (USB 2.0)
- **Dimensions:** 440 mm x 135 mm x 35 mm
- **Weight:** 1.2 kg
- **Cable Length:** 1.8 meters
- **Additional Features:** Anti-ghosting, N-key rollover, dedicated media controls

In the Box:

- KB-X1000 Keyboard
- USB Cable
- User Manual
- Keycap Removal Tool ●   Warranty Card

Key Features:

Customizable RGB Backlighting: Personalize the keyboard's illumination with a wide range of colors and lighting effects.

Mechanical Switches: Cherry MX Red switches for a responsive and smooth typing experience.

Programmable Keys: Assign macros and custom functions to any key with the included software.

Anti-Ghosting & N-Key Rollover: Ensure accurate keypress registration during intense gaming sessions.

Dedicated Media Controls: Easily control music and videos with dedicated media keys.

Setup Instructions **Unboxing:**

- Carefully remove the keyboard and accessories from the box.

Connecting the Keyboard:

- Plug the USB cable into an available USB port on your computer.
- The keyboard should be automatically recognized and ready for use. No additional drivers are required.

Software Installation (Optional):

- Download the configuration software from the manufacturer's website if you wish to customize key functions or lighting.
- Follow the on-screen instructions to install the software.

Keycap Removal and Replacement:

- Use the included keycap removal tool to gently pry off keycaps for cleaning or replacement.
- Replace keycaps by aligning them over the switch and pressing down until they click into place.

Using the Keyboard **Basic**

Typing:

- Simply start typing; the keyboard is pre-configured with standard key mappings.

Customizing Backlighting:

- Press Fn + F9 to cycle through preset lighting effects.
- Use the configuration software to create custom lighting profiles.

Programming Keys:

- Open the configuration software.
- Select the key you want to program.
- Assign a macro or function and save your changes.

Using Media Controls:

- Use the dedicated media keys (Play/Pause, Volume Up/Down, Mute) for easy media control.

Troubleshooting

Keyboard Not Responding:

- Ensure the USB connection is secure.
- Try connecting the keyboard to a different USB port. ● Restart your computer if necessary.

Backlighting Not Working:

- Check if the backlight is disabled or set to a minimal brightness level. ● Verify that the configuration software is properly installed.

Key Not Registering:

- Confirm that no physical obstructions are affecting the key.
- Test the key in different applications to determine if the issue is software-related.

Maintenance and Care

Cleaning:

- Disconnect the keyboard from the computer.
- Use a soft, dry cloth to clean the surface.
- For deeper cleaning, carefully remove keycaps and use compressed air to remove debris.

Storage:

- Store the keyboard in a cool, dry place.
- Avoid exposure to liquids or extreme temperatures.

Warranty and Support

- **Warranty Period:** 2 years from the date of purchase.

- **Customer Support:** For assistance, contact customer support via the manufacturer's website or call the support hotline at 1-800-555-1234.

Manufacturer's Website: www.keyboardcompany.com

Customer Support Email: support@keyboardcompany.com

"Thank you for choosing the KB-X1000. We hope you enjoy your new keyboard! Type Safe!"

1. After creating the web application, create a **repository** to store the SRC Folder (including the assets, images, and other components for your web application.

"Bitter are the roots of study, but how sweet their fruit."
-Cato

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