Project Report

Project Overview

Title: Dzongkha Typing

Developer:

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- Sonam Zangmo (12250084)
- Sundra Bomjan (12250090)

Abstract: Our website is mainly developed to address the difficulty students and teachers face when adapting to a new keyboard layout(Dzongkha). It helps the user to practice and master typing in a fun manner helping them to type faster and more accurately. We also included game-like features in our website to make it more fun for the user to type and engage.

Motivation: This project was motivated by the challenges we have seen within the educational community as both students and teachers were struggling with the new keyboard layout (which is dzongkha).

Objectives: Exploring HTML and CSS

- Learn more feature of HTML and CSS
- Properly understand HTML and CSS
 - **Learning Collaboration**
- Teamwork and planning
- Technical Collaboration
- Learn from each other

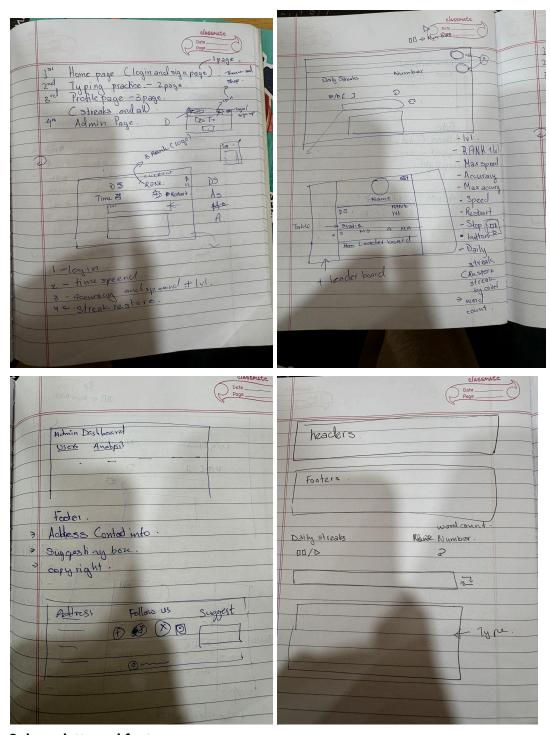
Key Goals:

- Use semantic HTML5 structure
- Use CSS layout
- Demonstrate professional coding practices by using modern approach to organise and maintain clean CSS files.

Design and Planning

Target Audience: This dzongkha typing website is a great tool for both kid and adult as it brings fun in learning. Anyone can instantly get started with typing in dzongkha language.

Planned layouts: Our team went through vigorous layers of brainstorms and discussions, and here are the sketches.



Color palette and fonts:

We used different websites to visualize color palette and fonts to achieve the masterpiece.

```
--color1: \( \textsquare \text{#0d1b2a}; \\
--color2: \( \textsquare \text{#1b263b}; \\
--color3: \( \textsquare \text{#415a77}; \\
--color4: \( \textsquare \text{#778da9}; \\
--color5: \( \textsquare \text{#e0e1dd}; \)
```

Implementation

Technologies Used:

- HTML
- CSS
- Font Awesome (for icons)

--font1: "Roboto";

--font2: "Rolling";

File Structure:

Images are organized in separate folder named Images and fonts are also stored separate folder named Fonts

The html files and css files are located in the root directory with two other folders that were mentioned above.

We have a single css file for the entire website since it is small and to ensure consistency in colors.

Challenges and solutions:

To work together was the main problem and we came up with a solution of using a VS code extension called live share which indeed helped us code together in the same directory.

Another problem was regarding naming conflicts and inconsistent colors. We chose to use CSS variables for both fonts and colors. Also we chose to adapt hierarchical selector to avoid classes naming conflicts.

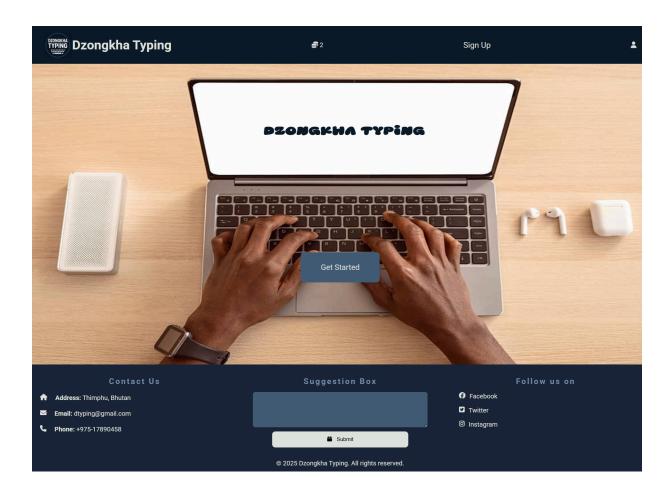
Team collaboration:

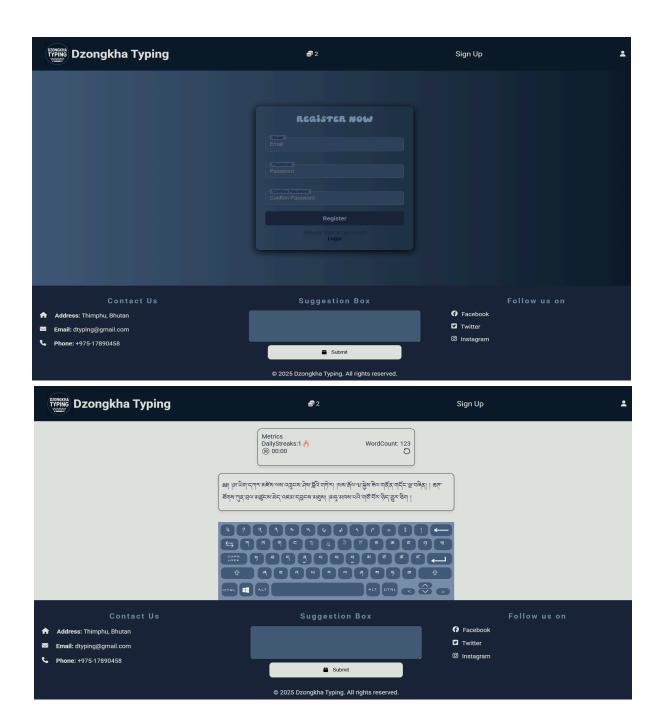
Phuntsho Shelkar: Home Page, Header & Footer

Sonam Zangmo: Forms (Login & Register), Typing Page, and Keyboard Design in canva

Sundra Bomjan: Admin Panel, Profile Page, CSS enhancements.

Demonstration





ABOUT US

Welcome to the **Dzongkha Typing App** – a simple and user-friendly tool created to support the growth of Bhutan's national language in the digital era. Many people, especially students and professionals, find typing in Dzongkha difficult because of limited tools and complex layouts. Our app was built to solve this problem by providing a simple, accessible, and efficient way to type Dzongkha anywhere.

OUR MISSION

Our mission is to make Dzongkha typing accessible to everyone – whether you are a student learning the basics, a teacher preparing lessons, or a professional creating documents. We aim to preserve our language and culture while making sure it thrives in the digital world.

We envision Bhutan where **Dzongkha is widely used online and offline**, where every individual has the right tools to type in their own language with ease. We want to see Dzongkha flourish on websites, social media, schools, offices, and beyond.

- Easy-to-use Dzongkha keyboard layout

- Supports typing on desktop and mobile
 Lightweight and fast performance
 Helps in learning Dzongkha typing for beginners

WHY CHOOSE US?

Typing Dzongkha on digital devices can be challenging, but our app provides a smooth and intuitive typing experience. Whether you are a student preparing assignments, a teacher creating study materials, or anyone who loves the Dzongkha language, this app is here to support you.

User-Friendly Design: No complicated setup — start typing Dzongkha instantly.

Made for Bhutan: Bullt specially to support Dzongkha, our national language.

Educational Support: Perfect for students, teachers, and learners of all levels.

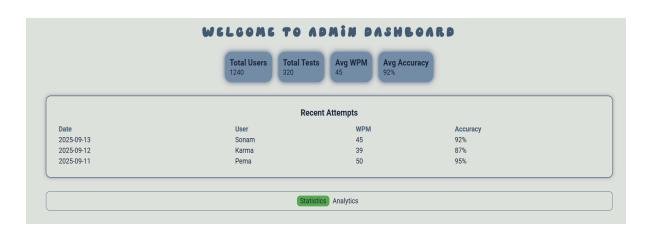
Cross-Platform: Works on both computers and mobile devices.

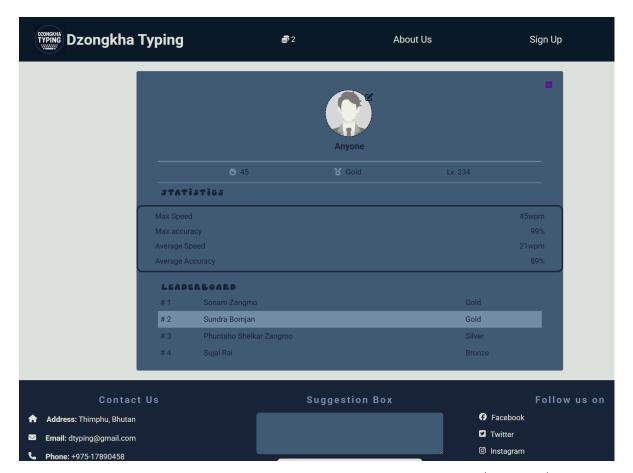
Lightwelght & Fast: Runs smoothly without slowing down your device.

Promotes Culture: Focuciages the use of Dzongkha in schools offices and police platforms.

- Promotes Culture: Encourages the use of Dzongkha in schools, offices, and online platforms.
 Free & Accessible: Available to everyone with no hidden costs.

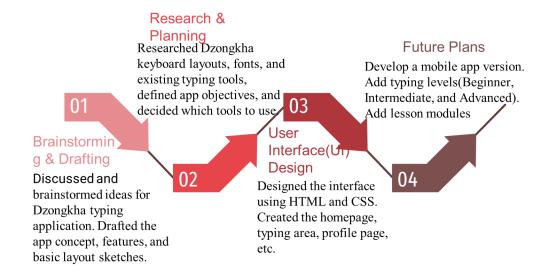






Complete code in https://github.com/Bomjan/groupwork1_s1.git (clonable)

Timeline



Responsive code

There was no need to adopt a responsive design for our website because it is specifically developed as a Dzongkha keyboard learning platform. The main users are expected to access the platform from desktop computers or laptops, as typing practice and learning Dzongkha scripts are more efficient and accurate on a physical keyboard. Since the website will not be opened or used on mobile phones or tablets, designing it for different screen sizes was not required.

Conclusion

In conclusion, the development of our Dzongkha Typing App was successful, and we were able to achieve the design we initially envisioned. The final interface turned out to be clean, well-organized, and easy to navigate, allowing users to comfortably practice Dzongkha typing.

Personal Learning

Through the process of designing the Dzongkha Typing App webpage, we gained valuable experience and knowledge in several areas. We learned how to plan and organize a project from the brainstorming stage to the final design. This helped us understand the importance of having a clear layout and structure before starting any coding work.

We also improved our knowledge of HTML and CSS, learning how to structure a webpage and style it to make it look attractive and easy to understand. We learned how to select suitable fonts, colors, and layouts that match the theme of a Dzongkha language learning platform.

In addition, we developed a deeper appreciation for the Dzongkha language and its digital representation. This project helped us realize how web design can be used to support and promote local languages and culture.

Overall, this project strengthened our creativity, design thinking, and attention to detail. It gave us confidence in creating our own web pages and inspired us to continue learning more about web design and development.