BM

Badmin
Spellz : An Educational Game To Improve Spelling and Proofreading

INTRODUCTION

Spelling is an important part of many day to day activities, yet there are no engaging resources readily available.

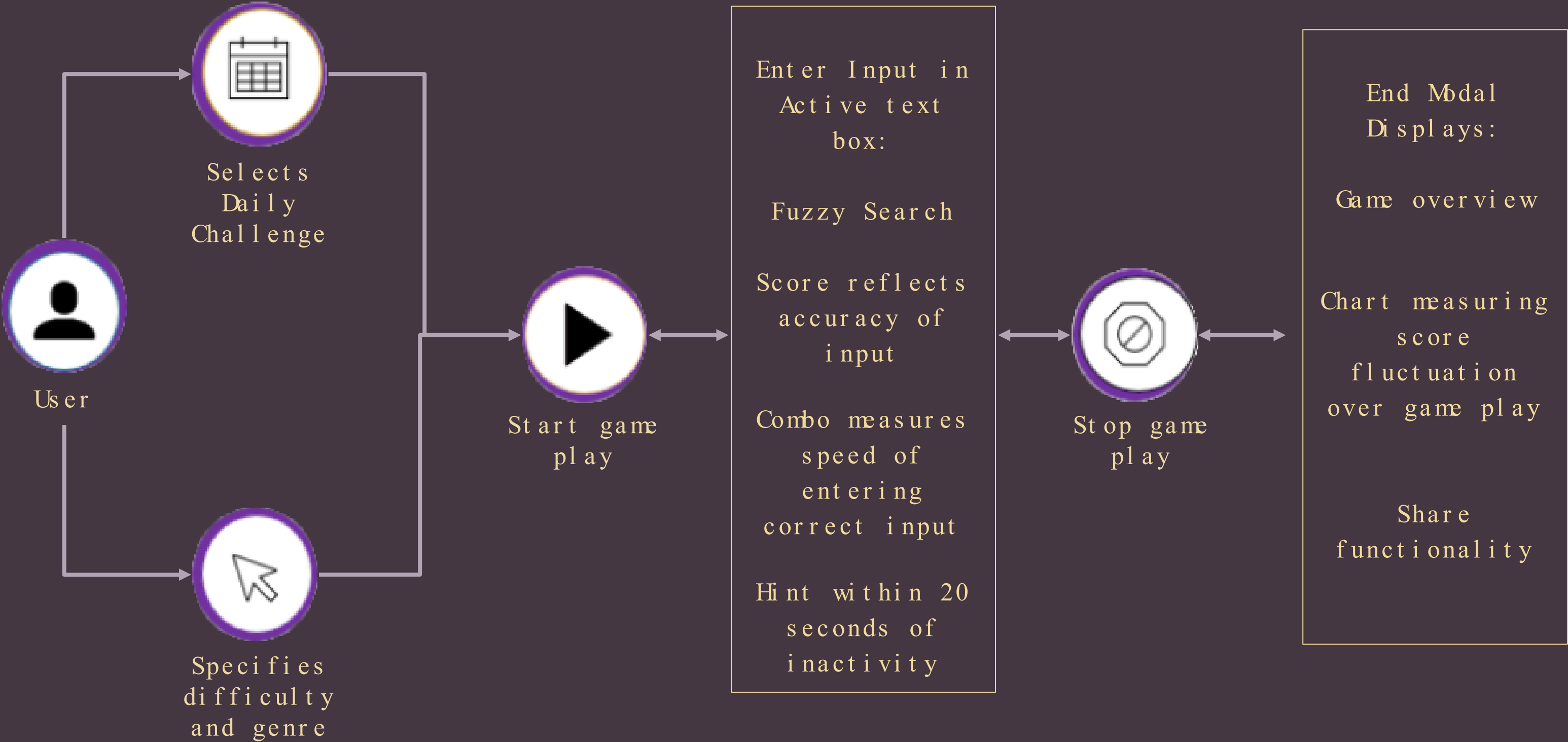Methods used to teach spelling have remained the same for decades.

ReType

- The prototype that Spellz is based on, it was built as a proposal to increase user productivity.
- Current functionality only has scope as a plugin for Word.
- It has bare minimum functionality, and UI is not engaging.

We want to improve people's spelling skills and we want to do it in such a way that it is productive by utilising ReType.

We stand out from competitors in the field by being accessible and simple, catering to everyone.

We also have an engaging UI and functionality which keeps people hooked.

SYSTEM ARCHITECTURE DIAGRAM

User

Selects Daily Challenge

Specifies difficulty and genre

Start game play

Enter Input in Active text box:

Fuzzy Search

Score reflects accuracy of input

Combo measures speed of entering correct input

Hint within 20 seconds of inactivity

Stop game play

End Modal Displays:

Game overview

Chart measuring score fluctuation over game play

Share functionality

TECHNOLOGIES

JS

Diff — Chart.js - Match - Patch

HTML5   CSS3

Firebase

OUTCOMES/RESULTS

We have created a functioning web application fulfilling the criteria as a gamified version of ReType, including its existing features, with animations. It successfully incorporates game elements that are well researched in the literature that will engage users to enjoy spelling and competing with friends and family.

1 Develop a gamified version of a Microsoft plugin, ReType

2 Develop a visually appealing and unified interface with animations for all ages to engage users

3 Develop using only Vanilla Javascript to ensure scalability

CONCLUSION AND FUTURE WORK

Goals That Were Met
- Create a game with ReType functionality
- Make the game accessible for everyone and engaging for all
- Have a hook that motivates users to continue playing the game

Goals Partially Met
- Gamify the experience

Goals Not Met
- Implement features for user personalisation

Solution Impact
By using our solution, people will improve their spelling. Our game stands out due to its simplicity, accessibility and engagement. In addition the ReType functionality improves user productivity and efficiency.

Future Plans
Some ways to improve on this existing product may be to incorporate:
- Leaderboards
- Themes
- A badge system
- A mobile friendly version of the game
- More accessibility features
- More animations and larger text banks

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