Introduction

BACKGROUND

iReader is a TOP3 online reading platform in China where young adults can read novels and non-fiction books, with 2 billion active users per month. Reading and listening are core features for our users.

PROJECT SCOPE

Listening includes: TTS(Text to Speech) with machine- generated voices; audio books with authentic human voices. We want focus on TTS feature as it was outdated, 60% books contain TTS feature and company will purchase more TTS resources for books in the future. In order to bring TTS in contextual usage, we designed a new global player for TTS, unified the TTS and audio books' players, improved the TTS control page to support users multitasking without quiting TTS.

TIMELINE

Project was conceptualized in May 2021, implemented in June 2021, launched in July 2021 on Android and iOS September 2021. As a lead designer, I collaborated with the product manager, engineers.

Challenage

TTS does not support multitasking

PROBLEM

The feedback we received from our users was they could not perform various actions while using TTS and needed to constantly quit and restart. For example, adding bookmarks, choosing another chapter or opting to go back to the home page to browse other books.

> **“I wanted to add a bookmark for a page in my favorite chapter while using TTS, but I can not do that, I want to listen while reading, so that I can better control my progress” (feedback from our user Xinyu)**

Users could not handle reading tasks while using TTS

Existing problems

TTS flow

disconnected

Reading tasks flow

How might we break the silo between TTS feature and reading tasks?

Why improving TTS? Does it impact business goals?

Retention rate is the north star of our company, and our project goal was to improve the usage rate of TTS as well as the total time spent on TTS.

Our data showed that a 1/3 of the users have listened the books (either TTS or audio books), and those users have a higher retention rate than the users who only read. Therefore, we decided to prioritize the TTS project as it directly impact company business goals and has large spaces for improvements.

Is this really a problem?

I collected some user feedback from customer service department and discovered TTS was rated as #1 among the negative experiences. Most of them were about not being able to do other things while using TTS. Thus we conducted an internal testing to understand user's needs when using TTS.

What are users' needs while listening?

✓ currently provide

1 pause/play/close ✓
2 select chapter
3 explore the app
4 add bookmark
5 make notes
6 TTS control ✓

high needs (2–5)

only 2%/ low need (6)

Findings:
1. our data shows 98% users rarely adjust (most of users adjust the setttings at the first time when using TTS) under TTS control.
2. user testing shows by tapping the screen, users intend to either quit TTS mode or change chapters/explore app/make notes.

Based on the data and the results of user testing, we concluded that allowing users to return to the previous page where they can change chapters, add bookmarks or explore app without quitting TTS are the actual needs.

DESIGN GOAL

Improve the TTS feature to help users fully control over their reading needs and exploring in the app

USER GOAL

Listening everywhere → business goal:improve the time spending

Yu Gao, born in 2000, a young teenager who loves to read and listen to novels in iReader. He is passionate about life, is adventurous and loves exploring new knowledge and wants to listen while engaging in different activities and adventures.

Users' needs while using TTS

browse othe pages, find or read other books

Users' goal

Need global audio player to support multitask

User goal 1: Help users to build strong connection with exploring while they listening

Make listening more efficient

Li Yang, born in 1997, loves interacting with books while listening, and wants to record her progress and also highlight her favorite passages in the books she has really loved.

Users' needs while using TTS

change chapter

add bookmark

make notes, underline sentence

Users' goal

Need related reading settings tasks

User goal 2: Provide related reading tasks while users using TTS

Based on the problems and direction, I came up with the following solution:

Provide global audio player for TTS to help users to easily control their reading settings while listening and build strong connections between listeing and reading with multitasking

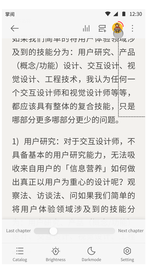
Design considerations:

Exsiting audiobook player:
1. If a new player for TTS, should we unify it with the audio book?
2. There are different control page for TTS and audiobook

Approach

DESIGN EXPLORATIONS

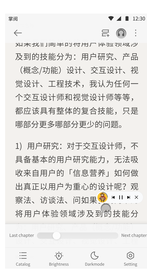
Option1: Add a new TTS player entry point on the navigation bar which is available for all pages



Testing findings about **Option 1**

- Users may become confused about two audio entry points as the navigation bar already has entry point for audio books
- The navigation items might get overlapped in certain pages
- Both the TTS and audiobook entry points have animation and users may feel overwhelmed
- Users need additional steps to control audios
- Users can perform other tasks while listening to the audio

Option2: Use a unified floating audio player component for both audio books and TTS



Testing findings about **Option 2** Move foward

- Users can perform other tasks while listening to the audio
- Users can control the audio in one place for both audio books and TTS
- Users can quickly play/pause/quit the audio in place
- Users seamlessly switch between the control pages of TTS and audio books
- We need to build a new player page for TTS as it is not compatible with the existing one

Why Option 2?

1. Floating audio player naturally provides users with multitasking capabilities
2. Unified UI representations can provide consistent experiences and reduce confusion
3. Users can easily adjust their audios in current page

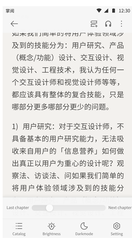
Option 2 Improvement

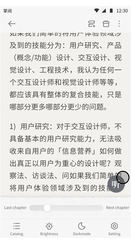
1. Enhance TTS entry point

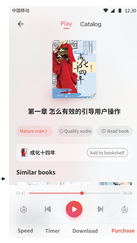
Moving the entry point from the navigation bar to the bottom of the screen will enhance visibility and efficiency

Before

After







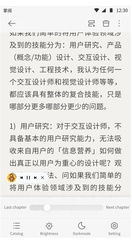
2. Simplify the floating audio player

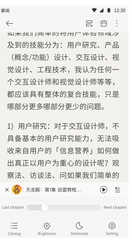
The floating audio player will partially overlap the current page, resulting in some information being blocked.We decided to only retain the essential functionalities (play/pause/close) and choose option 2

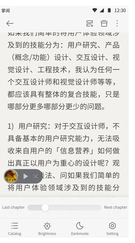
Before

After Option 1

After Option 2







Play control, speed up and down

Book chapter info and play control

Play, pause and close

3. Define the status of audio player

Question:If we use global floating audio play control, would it bet too eye-catching on the page?

Play

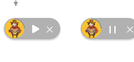
Pause

Loading

If no actions are taken within 5 seconds, the player will automatically hide several icons

Tapped

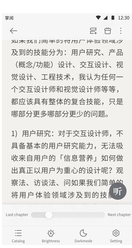
Unfolded（transition animation）

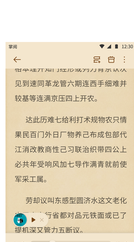


Consider it as an add on value, we roll it over to the next development phase

Approach

FINAL MOCKUPS





prototye

User jounery after design improvement

"Wow! That's wonderful, i can exploring all the books and make some social connections without quitting TTS mode, so that I can listening everywhere and everytime!"

——Yu Gao

"This makes my listening experience more efficient so that i can better record while listening"

——Li Yang

Validation

SUCCESSFUL METRICS

We expected to see the following outcomes：

1. Users will spend more time on audio（TTS, audio books）
2. More people will use TTS feature
3. Users who used TTS outside of reader/Total TTS Users ＞50%

A/B TESTING

We did the A/B testing with 10% users. Compared with the control group, we saw：

1.+3% TTS usage rate and time spent per user

2.97% user used TTS outside the reader

3.Retention rate of whole listening users has been increased

We did not see any negative results, all the metrics were positive, so we fully launched our new TTS flow and unitized audio play component

Result

IMPACT

Usage rate of TTS

3%

Time spending of TTS

4MIN

Time spending of the whole audio mode

1MIN

Reflection

FUTURE PLAN

Even though the new TTS had positive results, there is room for improvement based on user feedback：

make the floating audio player draggable and foldable

WHAT I LEARNED

Consistent design can help user better understanding