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#### INTRODUCTION

Our project is a language-specific learning platform that will be implemented as part of the instruction in the "Pathways to Success" STARTALK program at TCU Summer 2022, funded by the National Security Agency. The platform aims to assist students' learning in achieving the program's learning outcome - moving forward in Chinese language proficiency and the intercultural competency required to shore up that proficiency. The platform enhances learners' text reading process by incorporating text audio, romanization, vocabulary, and translation into one interface. The platform allows learners to practice and receive evaluations for oral communication with audio and video submission, thus creating a virtual space that enhances learners-to-learners and teachers-to-learners communication.

STARTALK



## SIGNIFICANCE

Most of learning management systems (LMS) are designed for general purposes. For example, when learning a new language, learners frequently encounter new characters, which requires them to look up for pronunciation or/and meaning. Without an embedded function in pre-existing LMS, the learners have to switch consistently between text passages and external dictionaries. Most of the existing LMS are also not user-friendly for oral communication instructions, as most features are text-focused.

Our goal is to develop a centralized language learning platform:

 Focuses on efficiency in learning by allowing instant access to romanization, audio, and definition of characters in textbooks.

 Enables interactive classroom experience where students and teachers can communicate by different means including video, audio, and text.

# Language Learning Platform: An application for the 2022 STARTALK Chinese Program at TCU

#### ROMANIZATION

Pinyin is the standard system of Romanized spelling for transliterating Chinese. By toggling the Pinyin function, the romanized spelling of each Chinese word would show above the original text.

STARTALK

Courses Forum Help Sign Out

第一课 打招呼 rén iī hū dū shì nǐ hǎo biā nǐ vī dìng kuài shuō "吧!很多人几乎都会用 zhǐ yào jiàn dào Zhōng guó péng you zǒng shì , 总是 朋友 中国 nǐ hảo dì vòng fả bìng bù "hello"和"你好"的 用法 并不 jué dà duō shù yǐ jīng xiāng shí dì Zhōng guó rén zài rì cháng jiàn miàn shí jí shǎo 见面时,极少 比如说 , 如果 早 、 中 、 晩 吃饭时间 跟 ér rú guð zài lù shang rén men xǐ huan shuō nǐ chī fàn liào ma 人们 喜欢 说"你吃饭了吗?",而如果在 路上 朋友 相遇

#### ARCHITECTURE



#### TRANSLATION

Our platform incorporates Google Translate API into the textbook so that students can get instant access to translation without having to direct to Google Translate webpage. Translate

#### Phrase:

我在美国的中文老师常说,中国人是这样的,中国人是那样的。

#### Translate:

My Chinese teacher in the United States often said that the Chinese are like this and the Chinese are like that. For example: "Chinese children are very filial to their parents, and Chinese students respect their teachers." "Chinese

Close

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# **AUDIO HOMEWORK**

Teacher can customize prompt and preparation time for each homework. Students and teachers can provide feedbacks on other students' work.

#### Question 1

User	Audio	Grade
quangtruong	▶ - ◄	95
Comment		
User	Content	
quangtruongstudent	Very Good	
quangtruong	Not so great, in my opinion.	
quangtruong	Interesting speech!	



Students can communicate with each in class through the feature Forum. Forum allows students to chat via different means of communications, and the GUI is designed to be similar to common messaging apps.







# **TEXT-TO-SPEECH**

Our platform allows students to listen to audio version of the textbook via Goggle Text-to-Speech API. Students can listen to audio recordings of words and sentences by highlighting the text and pressing the Text-

## VOCAB/CULTURAL WORDS

Teachers can add notes for words that need special attention by students, as well as change the highlight color to illustrate different

	Word:	
	多少	
	Desc:	
文 里 找 不到	多少 here does not function as a question word, but an adverb meaning "more or less, somewhat, to some extent." It must be placed after the subject and before the verb in the sentence. Expressions denoting quantity such as: 些 or 一点	
し像 privacy		
不好 的 意思	Close Save	

## FORUM

## CONCLUSION

Our language learning platform allows students to join a dynamic classroom environment by providing realtime feedback under different means of communication. The platform also simplifies the language learning process, by incorporating audio, romanization, and translation of Chinese texts into the textbook.

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