

**Development on Autonomous Spoken English Learning APP Platform** 

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**Abstract.** English as a language, the most basic function is communication and communication, oral English learning is very important. Students in the school of English learning to should try education is given priority to, "dumb" English become the biggest obstacle to learning English. Using APP mobile client implementation of individualized and autonomous learning oral English, become a mobile information age fast effective way to improve the level of spoken English. In this paper, according to the characteristics of the college spoken English, to cultivate students' autonomous learning ability as the center, follow the ideas and methods of software engineering, design of oral English autonomous learning platform, to provide technical support to the development of the software. This platform design fully absorbed the advantages of existing APP, has the characteristics of clear structure and applicability.

# Introduction

Oral English is widely used in the English oral communication language form. From the perspective of the forms of language, listening and speaking, reading and writing are written; Spoken language is the sound form of written language, written language is spoken language transcript. From the perspective of the development of human language, the primacy of the spoken language and written language is secondary; Oral English way and writing expression and the way, as well as vocabulary, syntax, information density and the language function aspect have obvious difference. From a cognitive point of view, listening and reading is the discourse understanding and the information input ability, speaking and writing is to express ideas and information output skills. The four skills in language learning and communication to promote each other, the lack of any a kind of activity will affect the normal communication.

English as a language, the most basic function is communication and communication, oral English learning is very important. But the spoken language has been the difficulties of the English learners. How to learn spoken English efficiently, which has become the general English education workers and the hot topic in English learners. Because of the complexity and the particularity of oral English learning in the learning process is vulnerable to learning environment, learning motivation, pronunciation and vocabulary, syntax, etc. With the wide application of computer and network technology, web-based autonomous learning has become an important learning style of students. The ministry of education put forward in "college English teaching reform project", to cultivate students' autonomous learning ability as the center, extensive use of modern information technology such as multimedia and network, improve the students' English comprehensive application ability. Actively advocate towards individualized and autonomous learning style.

Mobile learning as a new approach to learning, is being more and more attention and flexible learning time and learning content with fragmentation and other characteristics, has opened up a new concept of learning, let the learners really get rid of the limit of time and space, any time and any places according to the need to be autonomous learning. Using APP mobile client implementation of individualized and autonomous learning oral English, become an effective way to rapidly improve the level of spoken English. In this paper, according to the characteristics of the college spoken English, follow the ideas and methods of software engineering, design of oral English autonomous learning platform, to provide technical support to the development of the software.

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# **Typical Apps of Spoken English Learning**

APP about oral English learning is very at present much, before designing this platform carried on the thorough investigation and analysis, high students includes the following four:

(1) Speak more English. Speak more English to improve your oral English is human-computer interaction of APP, has rich interesting courses practical scene, intelligent scoring system of spoken, free of foreign teachers for counseling, easy practice anytime and anywhere, witness oral English improve rapidly. This APP has the following features: interesting courses practical scene, authentic American English, fun and close to the life of conversational classes, easy to learn. Combined with user interest intelligent recommended course, find the most appropriate course; Get out of the way, spoken English is more interesting, imitate the dialogue sentence recording for oral practice, intelligent spoken word for word, scoring system. Each level and keywords, help learning difficult words, through recruit reinforcement learning effect, make learning English more with a sense of accomplishment; With grammar, vocabulary and pronunciation, human oral English teacher for the user free tutoring in overseas, many ways to improve oral English ability quickly.

(2) English fluently. Fluent in English is an oral English teaching ideas and cutting-edge speech evaluation technology integration innovation application of spoken English learning. This APP has the following features: the content of the system arrangement and daily push after system arrangement of authentic American English dialogue, as long as the following exercises every day, can improve the level of spoken English; Personalized oral English teaching, with the latest speech evaluation technology from silicon valley, spoken English is a real time scale; Brand-new product experience, through games, and practice oral English. The innovation of teaching method, from the perspective of the real dialogue, such as vocabulary, grammar and listening skills improve, help user to solve various problems in the actual dialogue scenes; Free practice time, the content of the modular design, a few minutes to complete a practice, practice my oral English use the fragment time anytime and anywhere; Rich learning materials, covering life, business, work, travel and tourism, etc all kinds of scenarios, different ease, pay attention to the systemic and prestige.

(3) The essence of spoken English. Oral English essence is by practice English listening and speaking, and cultivate English thinking and communication skills of English learning software. Oral English essence release "fresh, rich and interesting" learning content, practicing English listening and speaking abilities at the same time, expand their horizons, expand knowledge, suitable for 15 to 35 years Old English learner with learning every day, improve English listening and speaking skills, subtly to cultivate English thinking. The original hearing has realized the captioned audio broadcast, weaken the interference of scene, it focus on English listening and oral English learning. Play sound, listening to the standard pronunciation, sound recording again, compare the pronunciation differences, learn standard pronunciation is imitation. Keep practicing everyday English listening and recording imitates, speech or current news, through reading and comparing, rapidly improve English listening and spoken English, understand English culture and fresh news from all over the world, to get rid of dumb English and Chinglish to lay a solid foundation.

(4) The castle oral English show. This apps are efficient practicing spoken English oral English show, and watch the wonderful American films at the same time, the tape to imitate the movie dialogue to practice oral English, provide vast amounts of popular American films, with intelligent speech scoring system, practice is given after recording scores and correct pronunciation errors, to improve my spoken English quickly. Main characteristics are as follows: video courses, select a number of segments of the American film made easy readable video tutorials, while watching the film could not speak English; Voice is pure, film soundtracks, imitate the most pure voice; Unique to every fine listens, slow voice, nondestructive quality; Imitate the dialogue and read, for every dialogue dubbing, finally generate themselves, the voice of America movie dialogue; Recording function, click on the button to start recording when learning, after reading the sentence without any operation, the system will give score; Intelligent voice grade, according to the pronunciation of each word in the sentence and the sentence fluency, sentence is given.

Oral English APP provides diverse learners of English learning mode and the way of obtaining learning resources, which has their own advantages and disadvantages, different emphasis of each



APP. Comprehensive analysis of the following problems: a lot of need to pay for resources, it calls the pronunciation of slow, lack of professional guidance, resource update slow, unable to real-time interaction. Difficult to meet the user for the accuracy of spoken English learning speech recognition, assessment and reality, offline downloads and online dictionary aspects of demand, the user experience.

#### **Autonomous Learning Related Theory**

Autonomous learning refers to the individual students in the learning process of active learning behavior consciously. Based on students has intrinsic motivation "want to learn"; Based on the students to master certain learning strategies "will learn"; Based on the will to "stick to learning". Autonomous learning is a systems engineering, needs the general teachers to change education teaching idea, the research on the rules of student's study, explore new education teaching management strategy, seek to cultivate autonomous learning ability of teaching mode and the arrangement of the learning content, learning methods and guidance.

During the course of autonomous learning research, some scholars understanding of autonomous learning model is put forward. Representative include: M.Taylor transition model of D.D.Pratt model of relationship between children's education and adult education R.G.Brockett personal responsibility orientation of autonomous learning model, G.O.C row of autonomous learning model, L.D.Hammond critical autonomous learning model, B.Delahaye study four stage model, D.R.G arrison dimension of autonomous learning model, autonomous learning process model of Pilling - Cormick, R.E.Boyatzis autonomous learning theory model, etc. Zimmerman of autonomous learning model is the most representative, as shown in Fig. 1. The solid line shows the strategies used in this picture, dotted line feedback loop.

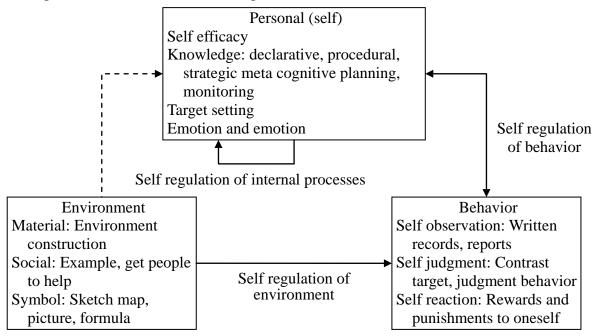


Fig. 1. Autonomous learning model of Zimmerman

(1) Metacognitive theory. Metacognition includes metacognitive knowledge and metacognitive control. Metacognitive knowledge is knowledge about cognition, namely what factors influence the process of cognitive activities and results; Metacognition is the management and control of the cognitive behavior control. Metacognitive ability and the learning ability of students, closely related to academic performance. Scholars in the process of English learning for students reading, memory, writing, and solve the problem of metacognitive function of intellectual activity, such as studies have proved that.



(2) The theory of constructivism. Constructivism assumes that each learner must construct their own knowledge, selectively in order to solve various problems in real environment. Teachers provide environment and support to help students construct knowledge. Guided by constructivism ideas can form a new set of more effective cognitive learning theory, and on this basis to realize the ideal of constructivism learning environment. Knowledge construction has certain regularity, and teachers can use these laws to promote students' learning.

(3) The humanistic theory. Thoughts on humanism teaching is not only the teaching of cognitive development, pay more attention to teaching the students' motives of emotion, interest, law of development. Teaching in the information age, must fully respect the student, pay attention to the students' inner demand, provide teachers into learning materials and create learning environment, teachers should pay attention to students' low level of demand, pay attention to in the process of teaching based on students, pay attention to the comprehensive development of students in the process of teaching the teacher is the promoter of students learning.

#### Software Architecture Design

Distributed multi-layer structure in software system development shows a good application effect, is dependent on down between layer and layer, bottom layer to the upper is ignorant, change the upper design for the bottom does not have any effect, conform to the concept of "high cohesion and low coupling. This system is connected by the presentation layer, business logic layer and data layer, by the interface connection between the layers, as shown in Fig. 2.

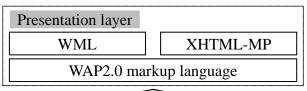
(1) The presentation layer. By decoupling, mobile terminals and the business logic controller receives the query request from mobile terminal, the business logic of the invocation model method processes the request, and the results returned to the mobile terminal page displays. WAP presentation layer used WML and XHTML MP. WML, have the characteristics of the syntax of XML, defines the tag library service wireless mobile design, absorbing the CSS and XHTML technical characteristics; XHTML - MP, with all the XHTML syntax requirements, is a W3C alliance limited specifically for mobile devices designed for the markup language, has realized the separation of mobile web content and style.

(2) Business logic layer. In the data layer and presentation layer, have the effect of flow in the data exchange, to store the data layer is the most basic logic together, form a kind of business rules. It made up of service components, functional components and safety management. Among them, the service component is used to achieve mobile service function; Functional components including the system management and practicing spoken English two functions; Safety management is completed through the security system and unified authentication system.

(3) Data layer. At the bottom of system exists in the server side, by the database management system to unified management and control of the database, to ensure the security and integrity of the database, create data objects in the database, including table, contact, view, index and process, etc.

## Conclusion

Students in the school of learning English is given priority to with test, in order to cope with various is given priority to with the written English test, the teacher teaches more vocabulary and grammar knowledge, "dumb" English become the biggest obstacle to learning English. Oral English is a skill, China and the international communication is more and more closely, learn practical oral English knowledge, can deal with work, business, and the actual problems abroad, etc. The purpose of college English teaching is to cultivate students the comprehensive application ability, especially listening and speaking ability, so that the students can effectively in English both written and spoken communication. Using the APP for oral English autonomous learning in accordance with the future development direction, this platform design fully absorbed the advantages of existing APP, has the characteristics of clear structure and applicability.



WAP gateway interface

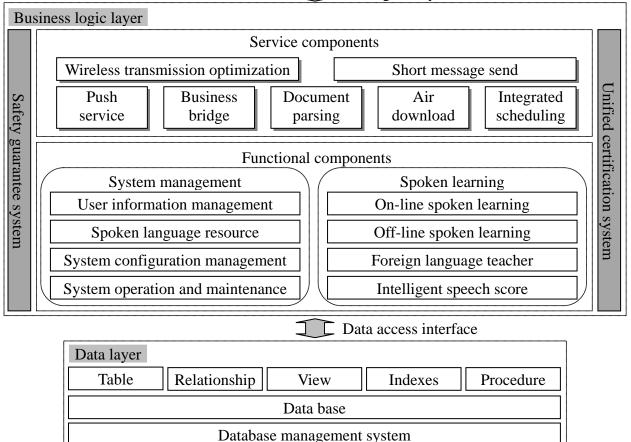


Fig .2. Software architecture on spoken English autonomous learning APP platform

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