The Automated-Phonetic Grading-Transcription Tool (The Linguistics Project) Jerrion Joy, Gouri Li, Dr. Cheryl Seals

Abstract

The APT-GT project or the lingustics project is aimed to help professors in educational department to manage their lectures, practices, and exams. This system is designed and developed on specfifc requirments collected from clients. This system is main focused on four types of users; Administrator, Teacher, Assistant, and Student, all who all belong to an educational system. The purpose of this project is to develop a training system for students in the field of communication disorders. We have created a tutorial for quiz and exam utilizing the IPA keyboard and our class project is to improve the web-based user interface of this project or create an iOS or Droid version of this system.

The learning environment is mobile, and teachers, researchers, technicians, and students are all mobile. From the perspective of its realization, the technical foundation for Web - based learning is mobile computing technology and internet technology - mobile interconnection technology [1]. The automatic grading tool aims at improving the students' level of feedback and optimized teacher's time. Several studies have reported the development of software tools that support this process. The grading tool should support the accuracy, consistency, and security of the grading mechanism and conduct time comparison analysis. The necessity for this tool is that we enlarge enterprise system (i.e. Canvas), but it does not provide tools to support the automatic grading system that will support phonetic transcription. With this

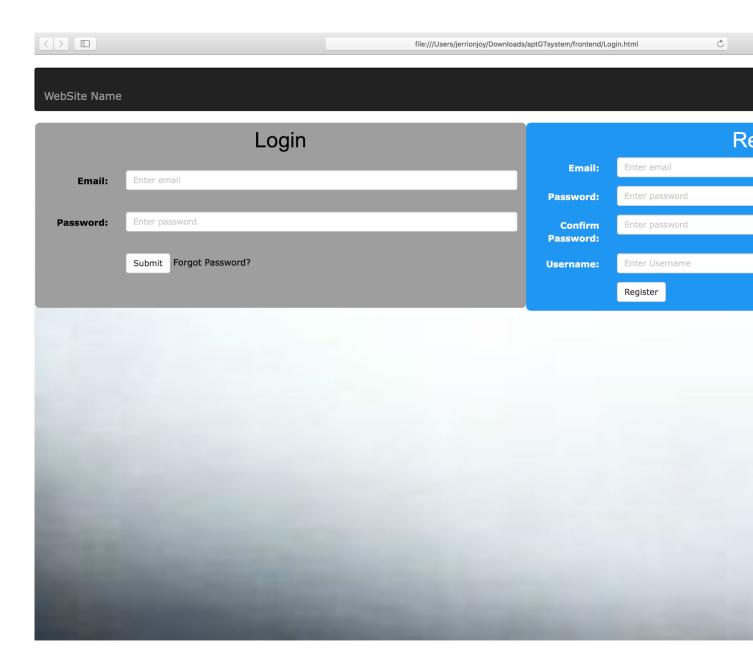
automatic grading tool for phonetic transcription not being currently available, we needed to begin the design process by exploring the model with communications professionals. Then based on our interactions with this group, we created a model for automated phonetic transcription and the automatic feedback needed to support this effort and provide immediate user feedback. APT - GT is an application that provides students with convenient e - learning and mobile learning experience and also offers easy - to - use student management for teachers. The project aims to help teacher s in the education department manage their lectures, practices, and exams. The current canvas system cannot meet the specific requirements of our clients. Therefore, we designed and implemented a unique system based on their requirements.

Implementation

The Apt - GT user interface design team was allotted eight weeks to work on the version 2.0 with the new client's requirements. The first week we worked on the design of the new function. First one is the function that teachers can copy course and materials without students' information and separate the classes into different semesters. For the second week, the team designed the conceptual model for future designing. Moreover, the next week the team developed two prototypes with different styles and confirmed with the clients. There were both

great features that our clients requested so we integrated the two prototypes into one version. The next four weeks, according to the final prototype, were utilized to develop the responsive components of the user interface and confirmed the system with our clients at the same time. In the last week, the team worked on the project paper and presentation.

System Comparisons



(Login for 1.0 system)



(Login system for 2.0 version)

M-learning a new source of E-learning.

Mobile learning and electronic learning offer new methods that decrease the statute of limitation on traditional learning methods. The existing devices and technologies to realize m-Learning as new stage of the progress of distance learning (d-Learning) and e-Learning. By nature, the m-Learning is a form of existing d-Learning and e-Learning. Historically the distance education has more than one hundred years of

experience and traditions. It's main characteristic is the distance and time separation between teacher and students. [2]. We can consider about the potentiality of the mobile learning by following statistical information concerning the number and the growth of cell phones, PDA, smart phones and users of mobile communications: more than 50% working places in USA are mobile [4]; until this moment all over the world are sold more than 500 mil. cell phones with web abilities [4]; the number of sold cell phones in Europe has growth of 25% for the first quarter of 2004 year; the number of sold PDA and smart phones has growth more than 200% for the last year; every quarter the number of companies developing software for mobile devices increases by 1000; up to 2005 the number of sold multifunctional mobile devices (PDA and smartphones) will exceed the number of sold personal computers; up to 2010 over 1 million users will use wireless Internet; up to 2010 there will be more than 1.8 million users of the mobile communications;

Neomillennial user experience design strategies using social networking media to support "Always On" learning styles.

As most sitting in the room today would be considered "millennials," we are considered to be part of the "always on" world of interactive media, the Internet, and digital messaging technologies, today's student has different expectations and learning styles than previous generations. Online learners have grown up surrounded by the digital world, and as a result have developed new ways of understanding,

learning, and processing new information. Designing for
Neomillenial learning styles: Online learners have grown up
surrounded by the digital world as a result of this new age of
technology the development of new ways of understanding, learning,
and processing new information.

How the "Always on Generation" uses technology;

74% use IM every week [3].

94% surf the Web for homework help [3].

41% use IM or e-mail to talk to teachers [3].

30% have used IM to find new friends [3].

Conclusion

APT - GT is an application that provides students with efficient learning experiences and also offers easy - to - use student management functions for teachers. The project aims to help teachers in the education department manage their lectures, practices, and exams. The current version did not meet the specific requirements of our clients. Therefore, we re - designed and upgrade d the system based on their requirements. During the developing process, the team discussed about the new requirements and updated and clarified the operation logic (i.e. separate the classes into semesters). The team created the wire frame based on the new requirements and then the system prototype was developed. The team met with the clients every week to ensure that the design and development process was on track. The team have completed all the development tasks within the time-frame specified.

- Jin, W., & Zhirui, D. (2017). Research on Mobile Learning Model of College English Based on WeChat Platform. Eurasia Journal of Mathematics, Science & Technology Education, 13(8), 5847 -5853.
 - 2. Georgiev, Tsvetozar, et al. *M-Learning a New Stage of E-Learning*. International Conference on Computer Systems and Technologies, 2004, pp. 1-5. Accessed 17 June 2018.
- 3. Baird, D. E., & Fisher, M. (2005). Neomillennial User Experience Design Strategies: Utilizing Social Networking Media to Support "Always on" Learning Styles. *Journal of Educational Technology Systems*, *34*(1), 5-32. doi:10.2190/6wmw-47l0-m81q-12g1