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# CAREER COURSES MOBILE APPLICATION (CCMA) FOR SSLC AND HSC IN GOVERNMENT HIGHER SECONDARY SCHOOL

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ABSTRACT :

The project aims to offer a thorough platform for secondary and higher secondary students to discover and pursue a range of career options. The application aims to bridge the gap between academic learning and real-world career opportunities by providing a wide range of recourses, including educational content. The project includes Text To Speech system, Google Translate system and TamilNadu Universities. The students can choose career choice. The project allows the students to choose own dream exams. The application enables both students and blind to learn the real-world opportunities. The feature of initiative is Text-To-Speech system, which ensures accessibility for all students, including those with visual impairments. The system not only enhances learning experiences but also promotes inclusivity by making educational materials audible and comprehensible. Additionally, integration of Google Translate enables students to access recourses in multiple languages, further broadening horizons and facilitating a global perspective on career options.

**Keywords**: Text To Speech system, Google Translate system

## 1. INTRODUCTION :

The project is designed to empower secondary and higher secondary students by offering a comprehensive platform that bridge the gap between academic learning and real-world career opportunities. By providing an extensive array of educational content and resources, the platform enables students to explore diverse career paths and make informed decisions about the futures. The initiative aims to address the often-overlooked need for career guidance at a critical stage in students' educational journeys, ensuring the students are well-prepared to pursue their aspirations [4].A key feature of the platform is its Text-To-Speech system, which enhances accessibility for both normal and visually impaired students. This feature ensures that educational content is accessible to all, promoting inclusivity and equal learning opportunities [1]. Additionally, the integration of Google Translate allows students to access resources in multiple languages, fostering a global perspective and enabling non-native English speakers to benefit from the platform's offerings [3]. The platform is designed with a user-centric approach, prioritizing intuitive navigation and seamless interaction to cater to the diverse needs and preferences of its users. This focus on user experience ensures that students can easily find and engage with the resources they need, making the platform an effective tool for career exploration and decision-making. By allowing students to customize their learning journeys and choose exams aligned with their career aspirations, the platform supports personalized learning and encourages students to take an active role in shaping their educational and career paths. Partnerships with Tamil Nadu Universities provide robust educational support and guidance, further enhancing the platform's effectiveness [4]. These collaborations ensure that students receive accurate and relevant information, as well as access to expert advice and mentorship. Overall, the project aims to inspire and engage students, encouraging them to explore, experiment, and discover their passions, thereby empowering them to take control of their future careers.

## 2. LITERATURE SURVEY :

Vishesh S, Kavya K, and Manish YM [1]: An extensive investigation into creating an Android application for bidirectional speech processing is presented in the paper "Android Application to Convert Speech to Text and Text to Speech," written by Manish YM, Kavya K, and Vishesh S. and published in the International Journal of Advanced Research in Computer and Communication Engineering, Vol. 8, Issue 2, February 2019. The goal of the project is to leverage Android's platform capabilities to develop a user-friendly mobile application that can accurately translate spoken words into text and vice versa. The writers describe the application's architecture and implementation in length, probably going over how they integrated voice recognition and synthesis technologies to get reliable performance. The study may contain comparisons, usability assessments, and experimental data illustrating the effectiveness of the program. The work contributes to enhancing mobile device accessibility and usability, catering to diverse user needs across communication, accessibility tools, and interactive applications in mobile computing environments. Raghavendhar Reddy B, Mahender E [2]: The paper titled "Speech to Text Conversion Using Android Platform" authored by B. Raghavendhar Reddy and E. Mahender, published in the International Journal of Engineering Research Application (IJERA), and explores the development and implementation of a system for converting speech input into text using the Android platform. The research focuses on leveraging the capabilities of Android devices to enable real-time speech

recognition and transcription. The authors discuss the design and architecture of the system, which involves utilizing Android's built-in features and possibly external APIs or libraries for accurate and efficient speech processing. The paper likely details experimental results, performance evaluations, and usability assessments to validate the effectiveness and reliability of the developed system. The work contributes to enhancing accessibility and user interaction with mobile devices through innovative speech-to-text technology, with potential applications in various fields including accessibility tools, mobile applications, and hands- free computing. Christanta Rejuna Phanes Sembiring Brahmana, Rudy Sofyan & Dian Marish Putri [3]: The paper titled "Problems in the Application of Google Translate as a Learning Media in Translation" by Phanes, Christanta Rejuna Sembiring Brahmana, Rudy Sofyan, and Dian Marisha Putri discuss the difficulties that arise when learning to translate using Google Translate. The study, which employs a case study methodology and a descriptive qualitative method, aims to identify the issues encountered by USU English literature students.. Drawing on theories by scholars such as Munday, Imre, Ghasemi, and Hasemian, the study highlights issues such as inaccuracies and mismatches in translated meanings, as well as structural errors in language usage. Findings suggest that student responses emphasize self-correction and consulting dictionaries to mitigate these issues. Despite the challenges, the study concludes that Google Translate can be effectively integrated into classroom learning, provided students develop strategies to address its limitations. This research contributes to understanding the practical implications of using machine translation tools in educational settings, emphasizing both the benefits and challenges for language learning and translation studies. Manali Surve, Vaishnavi Lalage & Pranali Darekar [4]: The paper titled "Vikalp App - An Android Application for Student Career Choices" addresses the critical need for effective career guidance among secondary level students. Developed by Manali Surve, Vaishnavi Lalage, and Pranali Darekar, all students of BE (8th Semester) at Vidyalankar Institute of Technology, the app aims to simplify the process of making informed career decisions. It provides comprehensive information on career paths, educational institutions, entrance exams, and aptitude tests, crucial for students in grades 9 to 12. The research underscores the repercussions of uninformed career choices, citing a survey where dissatisfaction with degree decisions stemmed from inadequate preliminary research. The app's design focuses on usability, acknowledging the tendency of existing systems to be overly complex. By leveraging mobile technology, particularly the widespread use of smart phones among young people, Vikalp App seeks to enhance accessibility and engagement. Overall, the paper contributes to the field by offering a practical solution to empower students with the knowledge needed to make sound educational and career decisions early in their academic journey.

## 3. PROPOSED SYSTEM :

The proposed system integrates a mobile application designed to assist students in selecting their career paths. The incorporates a Text-To-Speech (TTS) system tailored for Android Studio, utilizing the Android-provided TTS engine to convert text to speech within the application. The feature is particularly beneficial for visually impaired students, enhancing accessibility by enabling them to listen to textual content.

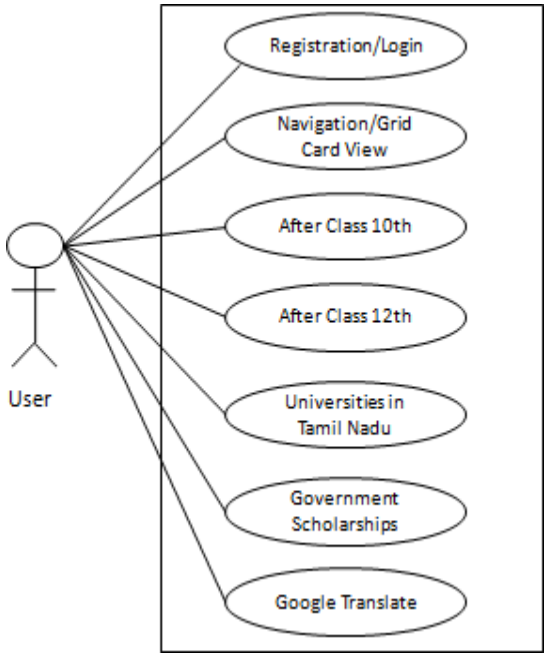


**Figure 1: Use Case Diagram of the proposed system**

## 4. MODULE DESCRIPTION :

### *4.1. After Class 10*

In this module, students have various options to continue educational or career preparation. The students can pursue higher secondary education, which typically includes 11th and 12th grades with a focus on science, commerce or arts streams. Alternatively, students can enroll in diploma courses that provide specialized training in fields like engineering, technology and design. Vocational courses are also available, offering practical skills and

certifications in areas such as healthcare, hospitality and information technology [4]. Additionally, students may choose to prepare for government exams, which can lead to jobs in various public sectors. To support visually impaired students, each educational pathway is equipped with a text to speech (TTS) system. Thus TTS system converts written content into spoken words, making content accessible to students who have difficulty reading printed text [1][2]. Technology ensures that visually impaired students can fully participate in any chosen field of study.

**Figure 2: After Class 10 Icon**

### *4.2. After Class 12*

After completing the 12th standard, students have multiple paths for further education or career preparation. The students can choose from a variety of courses, such as engineering, arts, science, diploma programs, and medicine [4]. Additionally, students may prepare for various government exams to secure stable job opportunities. Career aspirations and personal interests play a major role in the field selection process. For example, those interested in technology might opt for engineering, while those drawn to healthcare could pursue medicine. Arts and science courses offer a wide range of specializations to suit diverse interests, and diploma courses provide practical skills that can lead to immediate employment. Text-To-Speech systems are especially useful for visually impaired students, as they facilitate easier access to educational materials [1][4].

**Figure 3: After Class 12 Icon**

### *4.3. Universities in TamilNadu*

The official website links of Universities in Tamil Nadu include several institutions for easy access. In addition, major central government educational institutes located in Tamil Nadu are listed along with their respective website links. Students can click these links to visit the web portals and gather essential information. This comprehensive resource will aid students in exploring the various academic options available in the state. Using Java code to interact with XML data will make the system user-friendly, which is particularly advantageous for students during the decision-making process. Ensuring accessibility and ease of use will significantly enhance the overall student experience. Text-To-Speech systems are especially useful for visually impaired students, providing them with easier access to educational materials.

### *4.4. Scholarship*

In this module, the government allocated scholarships for students and official website links. Students can click the link to open the web portal to read the information, fill out the form, and register for scholarships. The XML structure should be detailed and organized, listing various scholarships along with eligibility criteria and deadlines. Java code will manage the interaction with the XML data, ensuring smooth navigation and user experience. Providing direct links to official scholarship website will save time and reduce confusion. Ensuring accessibility and ease of use will empower more students to pursue higher education without financial barriers. The initiative will contribute to greater educational equity and support academic aspirations. Text-To-Speech systems are particularly beneficial for visually impaired students, allowing access to educational material more easily [1].

**Figure 4: Scholarship Icon**

### *4.5. Google Translate*

Design XML and Java code to utilize Google Translates API, a robust tool that helps overcome language barriers and facilitates global communication. The XML structure should manage various languages and provide translations effectively. Java code will interact with the API, handling request and response processes smoothly. This setup will enable users to enter text in one language and receive accurate translations in another [3]. Incorporating error handling will ensure the system's reliability and user satisfaction. Additionally, the system should support multiple language pairs to

accommodate a diverse user base. The initiative will improve understanding and communication across different languages and cultures.

## 5. IMPLEMENTATION :

Implementation is the most crucial stage in developing a successful system and winning over users to the new, effective system. This entails replacing the outdated application with a newly developed one. The designed system is going to be implemented very soon because it has been approved and shown to be user-satisfactory. There is a basic operating process given so that the user may rapidly become familiar with the many functions. The executable form of the application must first be created and loaded onto a shared server that is accessible to all users. A network connection is also required for the server. The final stage is to document the entire system which provides component and the operating procedure of the system. The implementation involves the following things: Proper planning Investigation of the system and constraints Design the method to achieve the changeover Training the methods to achieve the changeover Training of the staff in the change phase.

## 6. RESULTS AND DISCUSSION :

The implementation of the platform has successfully empowered secondary and higher secondary students by providing a wide range of resources to explore diverse career paths. The integration of Text-To-Speech and Google Translate has significantly enhanced accessibility, making educational content available to both visually impaired students and non-native speakers. The user-centric design has facilitated intuitive navigation and personalized learning experiences, which have increased student engagement and active participation. Partnerships with Tamil Nadu Universities have ensured robust educational support, helping students make informed decisions about their futures. Overall, the platform has effectively bridged the gap between academic learning and real-world opportunities, equipping students with the tools and confidence needed to shape their career trajectories.

## 7. CONCLUSION :

The proposed mobile application introduces essential advancements in career guidance for secondary and higher secondary students. By integrating Text-To-Speech (TTS) and Google Translate functionalities, the application significantly enhances accessibility and inclusivity. Visually impaired students benefit from auditory access to textual content, while multilingual support ensures comprehension across diverse language backgrounds. Real-time updates and comprehensive educational resources empower students to make informed decisions about career paths, reducing the likelihood of mismatched choices.

## 8. FUTURE WORK :

Implementing AI algorithms is to provide users with customised career recommendations based on their interests and profiles. The introduction of virtual reality scenarios for interactive learning settings and realistic career simulations may be added. The realistic job simulations and interactive learning environments using virtual reality also added in future. Developing interactive materials for in-depth career assessments aids students in discovering their passions and strong points.

**Figure 5: Application Icon**


**Figure 6: The Application home page**

REFERENCE :


1. Manish YM, Kavya K, Vishesh S, et al.: “Android Application to Convert Speech to Text and Text to Speech”, International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE), Volume: 08, Issue: 02, February 2019.
2. B. Raghavendhar Reddy, E. Mahender, et al.: “Speech to Text Conversion using Android Platform”, International Journal of Engineering Research and Applications (IJERA), Volume: 03. Issue: 01, January-February 2013.
3. Christanta Rejuna Phanes Sembiring Brahmana, Rudy Sofyan, Dian Marisha Putri et al.: “Problems in the Application of Google Translate as a Learning Media in Translation”, Journal of English Language Teaching and Linguistics (JELT), Volume 4, Number 2, pp: 384-389, December 2020.
4. Manali Surve, Vaishnavi Lalage, et al.: “Vikal App – An android application for student career choices”, International Research Journal of Modernization in Engineering Technology and Science (IRJMETS), Volume: 05, Issue: 02, February 2023.