**A Project Abstract on**

**SECONDARY LANGUAGE ACQUISITION TRAINER**

**fulfilment of**

**grade for the subject**

**Artifical intelligence and Machine learning(24AD2001)**

**Submitted by**

**2420090011 - Ch.Lasya**

**2420090018 - Manudeep**

**2420090029 - Sri Charan**

**Under the guidance of**

**Faculty Name**

**Venkateswara Rao sir**

**KLEF (Deemed to be University),**

**Bowrampet, Hyderabad-500043, Telangana, India**

**Project title : Gait-Based Health Risk Detection**

* **Problem Statement :**

Learning a secondary language is often difficult due to limited personalization, lack of real-time feedback, and ineffective practice methods. Existing tools are either expensive or rigid, making it hard for learners to retain vocabulary, grammar, and pronunciation. There is a need for an adaptive and interactive trainer that makes language acquisition easier and more effective..

* **Objectives**

**Enhance Learning Experience** – Provide an interactive and engaging platform for learning a secondary language.

**Personalized Training** – Adapt lessons to individual learner’s pace, strengths, and weaknesses.

**Vocabulary & Grammar Development** – Improve retention and correct usage of vocabulary, syntax, and grammar.

**Pronunciation & Communication Practice** – Offer real-time feedback on pronunciation and sentence formation.

**Error Detection & Correction** – Identify mistakes and provide corrective suggestions instantly.

**Performance Tracking** – Monitor learner progress with measurable outcomes and improvement suggestions.

**Accessibility** – Ensure the trainer is affordable, easy to use, and available for diverse learners.

Proposed solution

To address the challenges of secondary language learning, we propose developing an **AI-powered Secondary Language Acquisition Trainer** that provides an adaptive and interactive learning environment. The system will use Natural Language Processing (NLP) and machine learning techniques to:

* Deliver personalized lessons based on learner progress.
* Provide instant feedback on grammar, vocabulary, and pronunciation.
* Include interactive exercises, quizzes, and real-life conversation practice.
* Track performance and suggest targeted improvements.

This solution will make language learning more engaging, affordable, and effective, helping learners acquire and apply a secondary language with confidence.

* + .
* **Expected Outcome**
* A functional trainer that allows users to **learn and practice a secondary language** interactively.
* **Personalized lesson plans** generated based on user performance.
* **Real-time feedback** on grammar, vocabulary, and pronunciation.
* **Error detection and correction** with suggestions for improvement.
* **Progress tracking dashboard** showing learner’s growth over time.
* Improved **fluency, accuracy, and confidence** in using the secondary language.

**Abstract**

In an increasingly globalized world, proficiency in a secondary language has become a vital skill for education, career advancement, and cultural exchange. However, many learners face significant challenges when acquiring a new language, such as lack of personalized instruction, inadequate practice opportunities, and limited real-time feedback. Traditional classroom methods often emphasize rote memorization rather than practical communication, while existing digital platforms can be expensive, rigid, or insufficiently adaptive to individual learner needs.

This project proposes the development of a Secondary Language Acquisition Trainer, an AI-powered platform designed to make language learning interactive, adaptive, and effective. The trainer will utilize Natural Language Processing (NLP) and machine learning techniques to analyze learner input, identify errors, and provide immediate corrective feedback. It will focus on improving vocabulary retention, grammar accuracy, pronunciation clarity, and sentence construction through structured lessons, interactive quizzes, and conversation practice modules.

The system will also feature personalized learning paths, adjusting content and difficulty according to each learner’s progress. A performance tracking module will monitor growth, highlight strengths, and suggest areas for improvement, thereby promoting long-term retention and fluency. By offering an affordable, user-friendly, and engaging solution, the Secondary Language Acquisition Trainer aims to overcome the shortcomings of traditional methods and existing tools.

Ultimately, this project seeks to empower learners with greater confidence and competence in their chosen secondary language, enabling them to communicate effectively in real-world scenarios and enhancing their personal, academic professional