INSTITUTION: THE EAST AFRICAN UNIVERSITY

SUPERVISOR NAME: Dr. ESTHER GACHANGA

GROUP NAME: BrAInstomerz

GROUP MEMBERS:

- MITHIBE IRUNGU
- GABRIEL GATIMU
- FAITH WANGECHI
- IAN ANDWATI
- STEPHEN SHITOTE

TITLE: PERSONALIZED CAREER PLANING THORUGH AI: MERGING ACADEMICS, SPORTS AND EXTRA CIRRICULARS

Introduction

The process of choosing a career path is often challenging for students. Even with the guidance of teachers, parents, or people already in the industry, students still find it hard and often rely on old methods to try and determine what may be good for the student. Over reliance on academic performance without looking at other performance areas like class relationships, and field performance may lead to sub-standard decisions and thus wrong career choices. This AI project aims to provide a solution that will help to analyze other performance areas for the student coupled with academic performance. This can then be assessed and graded, and this will be useful in helping them make a well-informed decision to better their future.

Problem Statement

Students often struggle with choosing a career that aligns with their diverse skills, interests, and achievements. Traditional career guidance systems tend to focus primarily on academic performance, neglecting the importance of other key factors such as sports performance, extracurricular activities, leadership roles, and creative talents. This narrow approach often leads to students being funneled into career paths that may not fully reflect their abilities or passions, resulting in dissatisfaction and unfulfilled potential.

While academic achievement is crucial, many career paths especially in fields like sports management, physical education, sports science, and even leadership roles in business require a blend of academic knowledge, physical prowess, teamwork, and other soft skills that are often developed outside the classroom. For example, students who excel in sports may possess unique skills such as discipline, perseverance, and teamwork that are highly valued in professional environments but overlooked by systems that only assess academic grades. Involvement in extracurricular activities such as debate clubs, music, arts, volunteering, and student leadership can further develop critical skills like communication, creativity, problemsolving, and leadership. These experiences often provide students with a well-rounded skill

set that can be just as valuable as academic success when choosing a career. However, without proper recognition of these non-academic achievements, many students are left without career guidance that considers the full spectrum of their capabilities.

There is a growing need for a more holistic system that evaluates both academic performance and other important factors such as sports achievements, extracurricular involvement, and personal interests. This system should provide personalized career recommendations that reflect the totality of a student's abilities, helping them to pursue fulfilling careers that align with their strengths in all areas, not just academics.

Objective

The primary objective of this AI project is to provide students with personalized career guidance that considers a broader range of factors, including academic performance, sports achievements, and extracurricular activities. By leveraging AI, the system will analyze these factors and suggest career paths that align with a student's strengths, interests, and skills.

Proposed AI Solution: The AI system will be a career recommendation platform that processes data from multiple areas of student performance. The solution will utilize a combination of machine learning algorithms, data analysis, and career mapping to generate personalized career suggestions.

Impacts and Benefits: The proposed AI system offers many benefits to students, educators, and the education system. Students will receive personalized career guidance based on a holistic understanding of their capabilities, not just their academic grades. Career counselors will be supported in offering more comprehensive guidance, enabling them to consider factors they might have previously overlooked. By aligning students' talents and interests with appropriate career paths, the system can help reduce job dissatisfaction and unemployment among young people. The system will support the development of a well-rounded workforce that values both academic and extracurricular skills, fostering diversity in industries.

Conclusion: The proposed AI project offers a new way to guide students in choosing careers by considering a wide range of their skills and achievements both academic and extracurricular. Using AI and data analysis, the system provides personalized career recommendations that better match students' unique talents. This approach not only helps students make more informed decisions but also supports educators in offering well-rounded advice. As the workforce increasingly values both academic and non-academic skills, this AI system addresses a key challenge by helping students find careers that align with their strengths and interests, leading to more fulfilling futures.