SKILLSYNC:

OPTIMIZING STUDENT COLLABORATION

GROUP 12

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MOTIVATION

Main Research Goal: Can AI enhance the team formation process?

Objective: Explore the potential of AI tools to improve the process of forming teams.

Method: Utilize AI for in-depth skill assessments and resume reviews to optimize team composition.

User Requirements

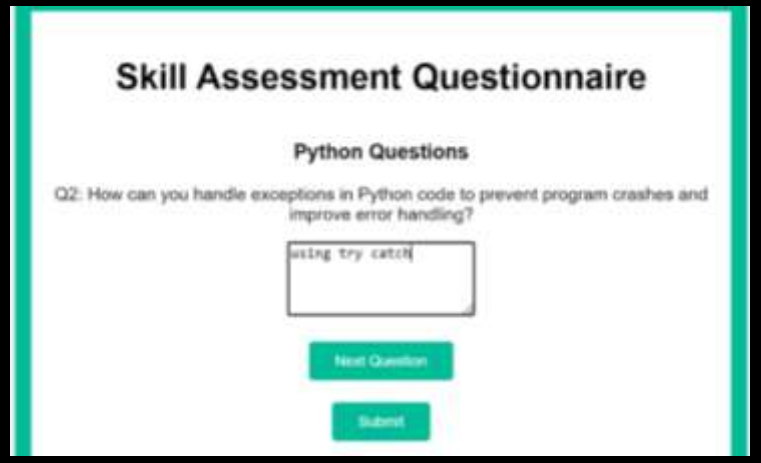
ENHANCED SKILL ASSESSMENTS THROUGH SUBJECTIVE QUESTIONS

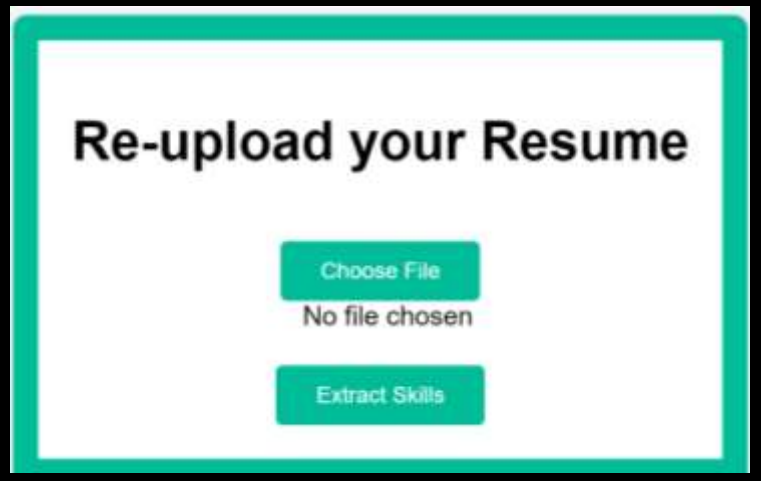
DIVERSE GROUP LEARNING ENVIRONMENTS

VARIED QUESTION DIFFICULTY TO SUIT ALL SKILL LEVELS

ENHANCED QUESTION DESIGN THROUGH PROMPT ENGINEERING

OPTIMIZED RESUME UPLOAD AND PARSING WITH OCR TECHNOLOGY



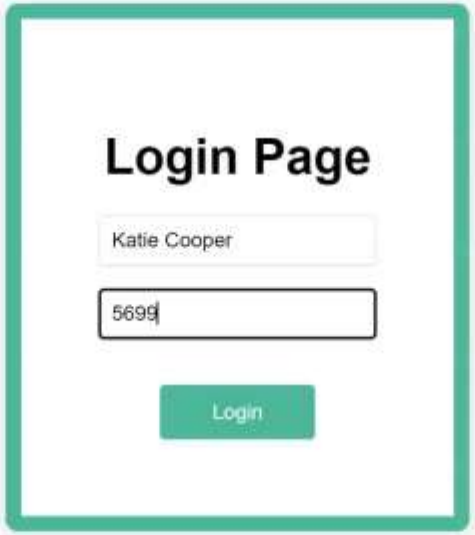


Interface

User feedback has driven the development of the SkillSync application to meet user needs

1. **Changed to Subjective Questions**
2. **Changed Question Difficulty Levels**
3. **Changed Resume Re-upload Interface**

Interaction



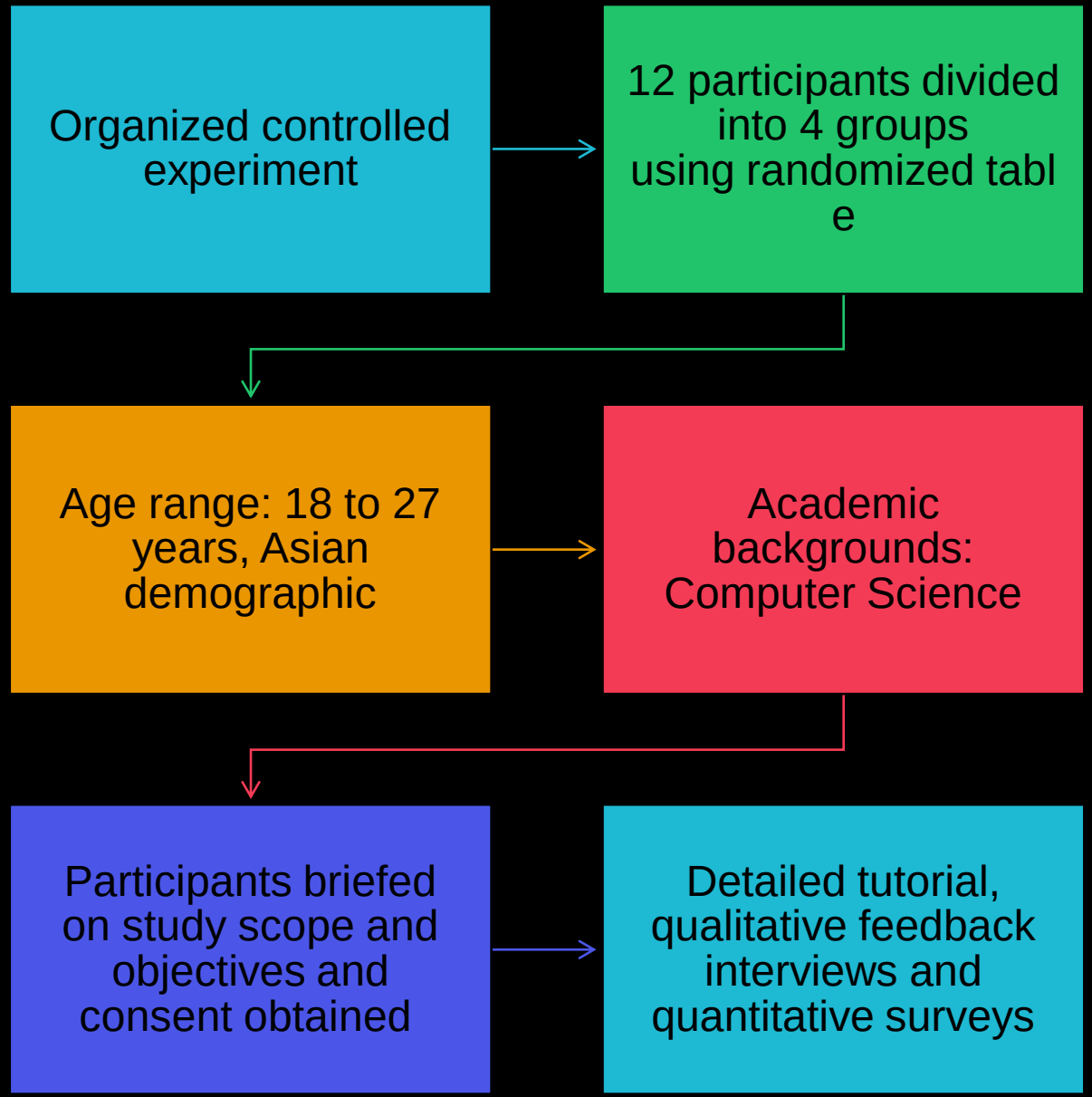
Hypothesis

SkillSync enhances team formation efficiency compared to manual process.

Questions and ratings generated by AI are more accurate than those provided by humans

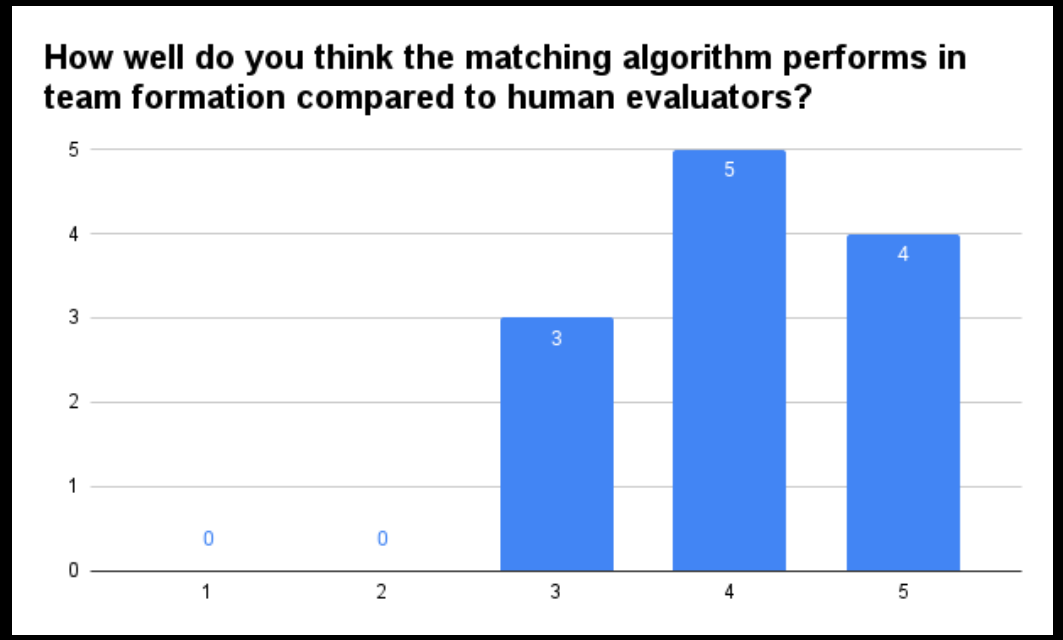
Effectiveness of teams formed using SkillSync’s matching algorithm versus humans.

Participants

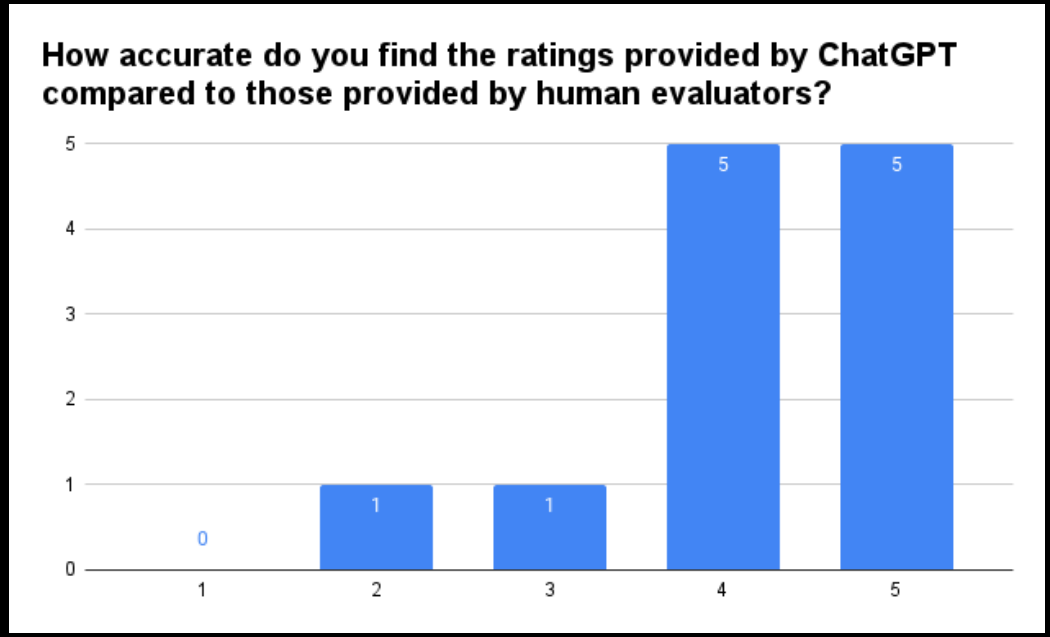


User Studies

We conducted surveys with 12 participants who responded to the questions below, and their responses are depicted in the bar graphs.



Independent variable: Method of formation – SkillSync vs Human
Dependent variable: Effectiveness



Independent variable: Source of rating – ChatGPT vs Human
Dependent variable: Accuracy

Key Findings

- **Secondary Hypothesis Examination**
  - Comparison of Team Effectiveness
  - AI Accuracy in Feedback and Ratings
- **Primary Hypothesis Validation**
  - Enhanced Matching
  - Real-world Application
- **Recommendations for Further Research**
  - Explore Additional Variables
  - Broader Application

Thank you