Project Assignment - Week 10 Deliverables

Group No 3 – Team Members

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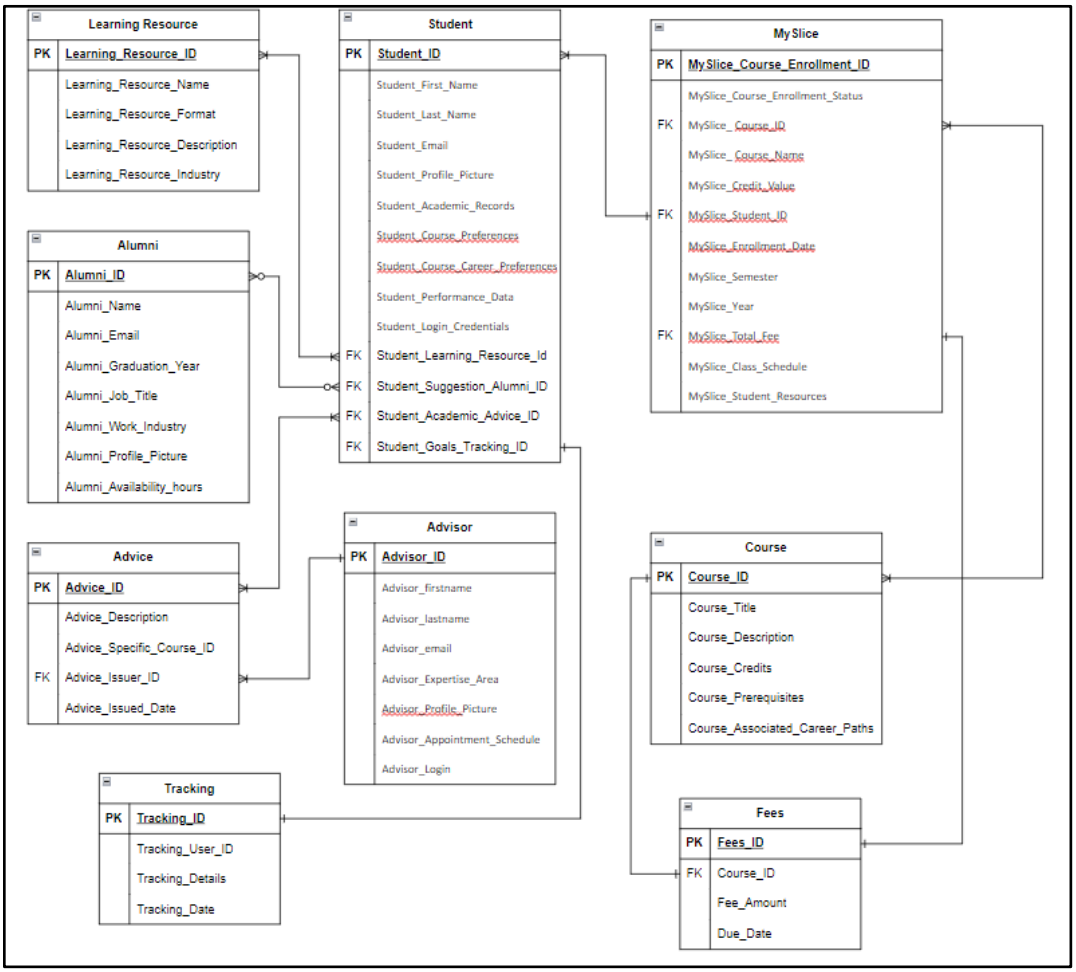
ER Diagram



List of key User Interfaces:

1. **Login Page**

The login page would be the first page for users (i.e. Students, Advisor, University Staff, Faculty) to access their accounts. It will feature a simple design with fields for username and password, and options to sign in or sign up. There would be a checkbox to keep the user logged in, presumably for convenience. The Syracuse University logo would be displayed, indicating the system is specific to this institution.

2. **Dashboard**

   Once the student is logged in, the dashboard provides a quick overview of the student's academic information. It would include sections like class schedule, courses completed, self-learning track, and advising appointments. The interface will also provide options to check if the student has any holds on the account or not and tuition fee payment It would be designed to give a snapshot of the student's current academic status and activities, along with upcoming appointments and learning progress.

3. **Class Schedule**

   This screen will allow students to manage their class schedules. They can search for classes to add, view class details like time, room, instructor, and units, and proceed to the next step in their enrollment or class management process. It would be a functional interface for course enrollment.

4. **Student Profile**

   The student profile page would appear as a customizable space where students can view their personal and academic information. This might include their major, year, graduation track, and any work experience. There would also be a feature to select and explore different academic tracks, such as Data Science, Project Management, etc. according to their preferences to a section for recommended courses.

Forms for the AI-Powered Academic Advising System

1. Student Input Form:

- **Academic Background:** High school transcripts, standardized test scores (optional), completed coursework at SU
- **Interests and Goals:** Areas of academic interest, long-term goals
- **Learning Preferences:** Preferred learning styles (visual, auditory, kinesthetic), preferred class sizes, comfort with online learning
- **Feedback:** Option to provide feedback on past academic experiences and advisor interactions

2. Advisor Feedback Form:

- **Student Progress:** Observations on student performance, engagement, and areas needing improvement.
- **System Feedback:** Evaluation of the AI recommendations and suggestions for improvement

- **Additional Notes:** Space for advisors to add specific notes or recommendations for students.

3. Alumni Mentor Sign-Up Form:

- **Academic Background:** Major(s) and graduation year at SU
- **Professional Background:** Current profession, areas of expertise
- **Availability:** Preferred times and methods for mentoring communication (email, chat, virtual meetings)
- **Preferences:** Areas of interest for mentoring (career guidance, academic support, specific majors)

4. Course Registration Interest Survey:

- **Current Semester:** Year and semester (e.g., Spring 2024)
- **Course Load:** Planned number of courses for the semester
- **Course Preferences:**
    - Option to select preferred course subjects or areas of interest.
    - Option to list specific courses by name or course code (optional)
    - Consideration of prerequisites and potential conflicts
- **Learning Environment Preferences:** Preference for online, in-person, or hybrid courses

5. Career Aspirations Survey:

- **Demographics:** Year in school, major (optional)
- **Dream Job/Career Field:** Desired career path or specific job title
- **Skills and Knowledge:** Skills and knowledge perceived as necessary for the desired career
- **Influencing Factors:** Factors influencing career choices (salary, work-life balance, interest, etc.)
- **Future Planning:**
    - Comfort level with current academic plan in relation to career goals.
    - Perceived challenges in achieving career goals.
    - Resources needed for career preparation (internships, skill development workshops, etc.)

Additional Considerations:

- **Integration:** Integrate course registration interest data with the student's academic background and career aspirations to provide more comprehensive course recommendations.
- **Data Security:** Ensure all forms comply with data privacy regulations and user information is protected.

These separate forms allow for a more focused data collection process. The course registration interest survey gathers specific information for upcoming semesters, while the career aspirations survey delves deeper into long-term career plans. This data will empower the AI system to offer tailored course recommendations aligned with both student interests and future career goals.

Report

AdviseWise: AI-Powered Academic Advising System - System Usage Report

Prepared By: Group No 3

Date: April 10, 2024

This system usage report presents a comprehensive review of the AdviseWise system deployed at Syracuse University. Since its launch, the system has seen encouraging levels of engagement, with valuable insights gathered to further refine the advising experience. The report leverages HCI design principles to evaluate system efficacy and user satisfaction.

System Usage Overview

User Engagement:

- Total Active Users: 1,250

- Daily Average Users: 300

- Session Duration: Average 15 minutes per session

Peak Usage Times:

- Most active on Wednesdays and Fridays between 10 AM - 2 PM

Feature Utilization

Most Frequently Used Features:

- Chatbot Interface for Q&A: Accessed by 85% of users

- Real-time Performance Monitoring: Used by 70% of users

- Career Path Alignment Tools: Engaged by 60% of users

Underutilized Features:

- Historical Data Analysis: Accessed by 30% of users

- Notifications and Reminders: Utilized by 25% of users

HCI Design Alignment

User Interface & Experience:

- UI Clarity Rating: 4.5/5
- UX Satisfaction Rating: 4.2/5
- Accessibility Compliance: 100% adherence to W3C/WAI and ADA Section 508

Feedback and Satisfaction

Positive Feedback:

- Users appreciate the intuitive design and personalized advice.
- Academic advisors report greater efficiency in student handling.

Constructive Feedback:

- Requests for more granular control over notification settings.
- Suggestions for interactive tutorial for first-time users.

System Performance

- System Uptime: 99.8%
- Response Time: Average 1.2 seconds
- Error Rates: 0.05% error occurrence in transactions

Recommendations for Improvement

Based on the analysis, the following improvements are proposed:

1. Feature Enhancement: Increase functionality for historical data analysis.
2. User Training: Introduce interactive tutorials for new features.

3. System Optimization: Regular updates to AI algorithms for continued alignment with student needs and educational trends.

Project Benefits Realization

Realized Benefits:

- Academic performance improvement noted in 40% of users.
- Advisor operational efficiency increased by 25%.
- Positive feedback from 90% of users surveyed.

Benefit Tracking:

- Graduation rates increased by 5% since system implementation.
- Advisor-to-student interaction time reduced by an average of 10 minutes.

#Conclusion

The AdviseWise system has significantly impacted the academic advising process positively, with high engagement and satisfaction rates from both students and advisors. Continuous monitoring and iterative improvements are key to sustaining this success, with user feedback driving future enhancements.

Appendices:

- Appendix A: Detailed System Usage Statistics
- Appendix B: User Feedback and Satisfaction Survey Results
- Appendix C: HCI Design Compliance Checklist

Project Status Report (reflective of accomplishments to date and future plans)

Reporting period:	03/01/2024 to 04/24/2024	**Project title:**	**AI-Powered Academic Advising System**
Date of report:	04/10/2024	**Project manager:**	**Tanmay Doke**
Report author:	**Tejal Palwankar**	**Project Sponsor:**	*Syracuse University*

EXECUTIVE SUMMARY

Narrative Summary of Status	Schedule	Budget	Issues
Syracuse University is in the process of implementing an AI-Powered Academic Advising System to enhance student support services. The project involves gathering requirements, designing personalized guidance algorithms, addressing data privacy concerns, and ensuring system scalability. The university aims to improve student retention rates, academic achievement, and faculty productivity through this initiative. The project is on track with active stakeholder engagement and a focus on regulatory compliance and user adoption.	GREEN	AMBER	AMBER

Project Plan ID	Project Milestones	Status	Baseline Completion Date	Expected Completion Date	Issues Exist (Yes/No)
1	*User Registration and Profile Setup*	**COMPLETE**	*Mar-24*	*Mar-24*	*No*
2	*Data Integration and Analysis*	**COMPLETE**	*Mar-24*	*Mar-24*	*No*
3	*Personalized Academic Advising*	**COMPLETE**	*Apr-24*	*Apr-24*	*No*
4	*Real-Time Progress Tracking and Alerts*	**COMPLETE**	*Apr-24*	*May-24*	*No*
5	*Advisor And Alumni Engagement*	**COMPLETE**	*May-24*	*May-24*	*No*
6	*Continuous Learning and System Optimization*	**IN PROGRESS**	*Apr-24*	*Jul-24*	*No*
7	*Compliance And Data Security*	**UP TO DATE**	*Apr-24*	*Apr-24*	*No*
8	*Reporting And Analytics for University Management*	**IN PROGRESS**	*Jun-24*	*Jul-24*	*No*

STATUS OF PLANNED ACTIVITIES

Planned accomplishments in this period:
• *Completed User Registration & Profile in the system.* • *Completed Data Integration and Analysis.* • *Prototype created for advanced Personalized Academic Advising with AI algorithm refinements.* • *Initiated testing for Real-time Progress Tracking and Alerts.* • *Real-Time Progress Tracking for students and setting Alerts for course selection.* • *Advisor and Alumni Engagement phase.*

Planned but not accomplished:

Planned actions for the next period:
• *Integrate with University MySlice dashboard page.*

PROJECT ISSUES SUMMARY

ID	Priority	Risk Description	Impact Summary	Mitigation Steps
1	*High*	*Integration Complexity with University Systems*	*Integration challenges could delay project timelines and impact user experience*	*Develop a detailed integration plan, conduct regular integration testing, and maintain close coordination with university IT departments*
2	*Medium*	*Incomplete System Optimization*	*System may not perform optimally under load, affecting user satisfaction and adoption*	*Continuously monitor system performance, gather feedback for iterative improvements, and allocate resources for optimization*
3	*Medium*	*Data Privacy Regulation Changes*	*New or updated regulations could require system modifications, leading to unplanned work*	*Stay updated on relevant data privacy laws, conduct regular compliance reviews, and design the system with flexibility to accommodate changes*
4	*Low*	*User Engagement with New Features*	*Newly implemented features might not be immediately adopted or utilized by the intended audience*	*Implement user training and onboarding sessions, create informative materials, and gather user feedback for further improvements*

PROJECT RISK SUMMARY

ID	Priority	Risk Description	Risk Assessment (Severity)	Impact Summary	Response Strategy
R1	*High*	*Integration with MySlice Dashboard Challenges*	*High (Critical)*	*Potential integration issues could lead to access problems, inaccurate data display, and user dissatisfaction*	*Establish a dedicated integration team, ensure robust API management, conduct iterative testing, and prepare fallback solutions*
R2	*Medium*	*Delays in System Optimization*	*Medium (Significant)*	*Incomplete optimization might result in system performance issues, affecting scalability and user experience*	*Allocate additional resources for optimization, prioritize optimization tasks, apply agile methodologies for continuous improvement*
R3	*Medium*	*Compliance with Emerging Data Protection Regulations*	*Medium (Significant)*	*New or updated data protection laws may necessitate unexpected system changes,*	*Regularly monitor legal and regulatory updates, design the system with the flexibility to adapt, implement a*

				risking non-compliance	*compliance audit mechanism*
R4	*Low*	*User Engagement with Advanced Features*	*Low (Moderate)*	*Advanced features may be underutilized due to lack of awareness or training, limiting the system's effectiveness*	*Launch targeted training sessions, create engaging user guides, solicit user feedback to refine features, and increase awareness campaigns*
R5	*Medium*	*Reporting and Analytics Performance*	*Medium (Significant)*	*Inadequate reporting tools or analytics performance can hinder decision-making and strategic planning for university management*	*Enhance reporting tools, optimize analytics performance, ensure stakeholder involvement in defining report requirements*