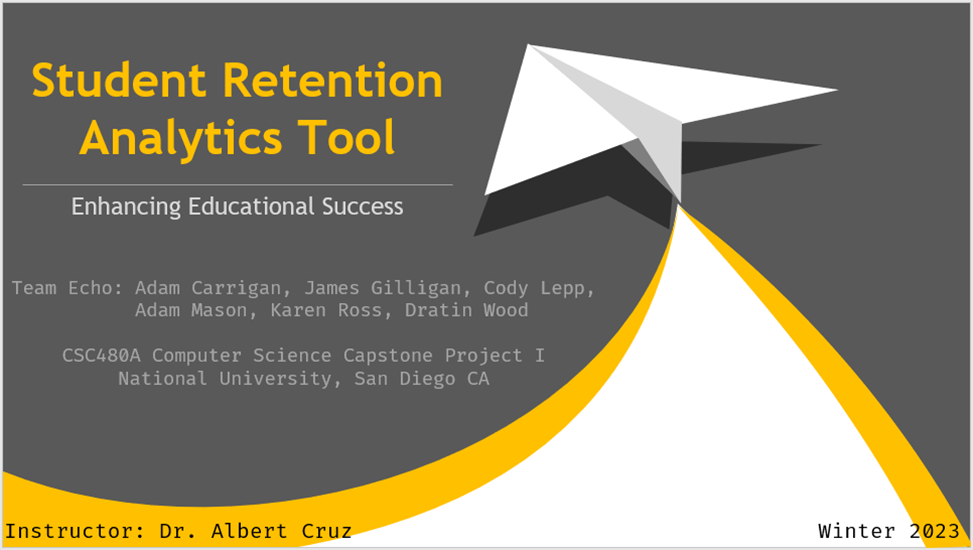
Title Slide:---karen–

Sample of one i have found so far, let me know what ya guys think and ill see if i can’t upload this so you guys can see the other slides.

Slide 2: Agenda Slide–karen–

**Introduction:**

Overview of the project and its importance in enhancing student retention.

**Background and the Need for the Project:**

Discussing the challenges in student retention and the necessity for a specialized tool.

**Project Objectives and Scope:**

Outlining the primary goals and the specific scope of the project.

**Customers and Stakeholders:**

Identifying the key stakeholders and their roles in relation to the project.

**Project Requirements:**

Detailing both functional and non-functional requirements of the SRT.

**Project Assumptions and Constraints:**

Discussing the underlying assumptions and constraints impacting the project.

**Project Delivery Methods:**

Explaining the Agile methodology and expected delivery approach.

**Evaluation, Selection of Technology, and Tools for Project Implementation:**

Overview of the technologies and tools chosen for the project.

**Agile Team Formation, Responsibilities, and Implementation Iterations:**

Detailing team roles, responsibilities, and the plan for implementation iterations.

**Conclusion:**

Summarizing the project proposal and its impact on student retention.

Slide 3: Project Team

**Adam Carrigan:**

Role: Program Tester and Data Analyst.

Expertise: Aerospace mechanics, property management, sales, and entrepreneurship. Brings a unique blend of technical and business skills.

**James Gilligan:**

Role: Data Analyst.

Expertise: Airborne sensors and weapon systems, unmanned aerial systems, naval special warfare. Experienced in requirement analysis and development.

**Cody Lepp:**

Role: Software Engineer and Concept Designer.

Expertise: Customer interfacing, requirements engineering, technical writing, algorithm design, machine learning modeling, and project management.

**Adam Mason:**

Role: Data Analyst.

Expertise: Customer service, IT, cybersecurity, auditing, Lean Six Sigma, and instruction. Combines customer service and process improvement ideologies.

**Karen Ross:**

Role: Acting Scrum Master, Data Analyst, Software Developer.

Expertise: Proficient in C++, Java, SQL, and Python. Oversees the SRT project, ensuring coordination and workflow management.

**Dratin Wood:**

Role: Software Developer.

Expertise: Customer service, data management, and information systems. Instrumental in application development and aligning project outcomes with customer needs.

Slide 4: Introduction Slide

**Project Overview:**

- The Student Retention Analytics Tool (SRT) is designed to enhance student retention across educational institutions.

- Utilizing data analytics to identify key factors influencing student retention, such as attendance patterns, learning progress, and feedback.

**Core Aim:**

- To create an analytics tool that provides educators and staff with insights and actionable recommendations.

- Aims to bridge the gap between traditional teaching methods and modern, data-driven approaches.

**Enhancing Learning Experience:**

- Focus on making the learning experience more engaging and effective, with the expected outcome of improved retention rates.

- Not just about understanding student engagement but also about continuous improvement in teaching and learning strategies.

**Project Significance:**

- Addresses the perpetual challenge of fostering an environment where students thrive and stay engaged.

- Lays a foundation for future advancements in educational methodologies.

Slide 5: Background and the Need for the Project

**Challenge in Student Retention:**

- Highlighting the ongoing challenge educational institutions face in maintaining and improving student retention.

- Emphasize the importance of student engagement for successful educational outcomes.

**Traditional Methods Limitations:**

- Discussing the insufficiency of traditional methods (like manual tracking) in capturing nuanced patterns of student engagement and progress.

**Need for a Specialized Tool:**

- The necessity for an adaptable, data-driven tool that can cater to the specific needs of various educational settings.

- The SRT project aims to fill this gap by providing a sophisticated analytics solution.

**Data-Driven Approach:**

- Importance of leveraging data analytics to understand and improve student retention.

- The SRT's role in providing actionable insights based on comprehensive data analysis.

**Impact on Educational Strategies:**

- The potential of the SRT to significantly enhance student retention rates within existing educational resources and curriculum.

- Aligning institutional assistance with student preferences and evolving needs.

Slides 6-7: Project Objectives and Scope

Slide 6

**Primary Objective:**

- Development of a sophisticated analytics tool to analyze critical factors influencing student retention within educational organizations.

- Providing actionable insights for targeted interventions.

**Secondary Objectives:**

- Data pipeline optimization for efficient data analysis.

- Seamless integration of the SRT within existing organizational information systems.

Slide 7

**Advanced Analytics and Machine Learning:**

- Utilizing advanced analytics and machine learning models to offer a comprehensive understanding of factors contributing to student retention and attrition.

- Enabling data-driven decisions for developing effective support strategies.

**Scope of the Project:**

- The project is focused exclusively on developing the SRT for educational institutions.

- Exclusion of business growth metrics and limited focus on individual student success.

**Non-Interference with Existing Strategies:**

- The SRT is designed to complement, not disrupt, current educational strategies and operational processes.

- Integration designed to be harmonious with existing systems.

Slides 8-9: Customers and Stakeholders

Slide 8

**Customers:**

- Educational Institutions: The primary users of the SRT, specifically administrative staff, for monitoring and improving student retention.

- Educational Instructors: Secondary users, employing insights from the tool to support and motivate students, particularly those at risk of disengagement.

Slide 9

**Stakeholders:**

- Educational Administrators and Tutors: Primary users of the SRT, utilizing insights for targeted interventions to improve student retention.

- Marketing Team: Utilizing insights for refining marketing strategies to attract and retain students effectively.

- Sales Team: Benefitting from understanding the key aspects of the program that contribute to student retention for better communication with potential customers.

- Executives/Leadership: Using insights for strategic decision-making in resource allocation, business strategy, and institutional adjustments.

- Parents: Receiving tailored guidance to aid their child’s academic development, fostering collaboration between home and educational institutions.

- Students: Benefiting from targeted support that aligns with their unique learning needs and challenges.

Slides 10-11: Project Requirements

Slide 10

**Functional Requirements:**

F01: Access to existing student academic data in learning centers' databases.

F02: Ability for users to view and assess student progress.

F03: Functionality to report student disenrollment or intent to disenroll.

F04: Retention of historical student data for trend analysis, with PII protection.

F05: Analysis of attendance and academic progression data of disenrolled students.

F06: Identification of at-risk students based on historical trends.

F07: Notification system for users about at-risk students and associated risk factors.

F08: Resource sharing capabilities for faculty members.

F09: Facilitation of data provision for parent-teacher meetings.

F10: Modeling and prediction of future enrollments with defined accuracy thresholds.

Slide 11

**Non-Functional Requirements:**

NF01: Simple and intuitive user interface.

NF02: Adherence to cybersecurity best practices for data protection.

NF03: Timely notifications for at-risk students.

NF04: Fast data loading and processing capabilities.

NF05: Scalability to handle increasing data volumes without compromising performance or security.

NF06: Compatibility with different operating systems (OS agnostic).

NF07: Prevention of unintended data aggregation from different students.

Slides 12-14: Project Assumptions, Constraints, and Priorities

Slide 12

**Project Assumptions:**

- User Engagement: Expecting active engagement with the application by students, educators, and program coordinators.

- Data Availability: Access to relevant and accurate student performance and engagement data.

- Stakeholder Availability: Timely input and cooperation from key stakeholders for decision-making.

- Technology Compatibility: The chosen technology stack is suitable and efficient for the application's requirements.

- Regulatory Compliance: Adherence to all relevant data protection and privacy regulations.

Slide 13

**Project Constraints:**

- Budget: As a school project, this is an unfunded endeavor for all development, testing, and implementation phases.

- Time: Fixed timeline for project completion, aligned with academic calendars.

- Staffing: Availability and skill level of personnel, potential gaps in necessary skills.

- Technology Limitations: Constraints related to existing technology infrastructure and compatibility issues.

- External Dependencies: Reliance on third-party services or APIs, which may pose risks if not managed properly.

Slide 14

**Project Priorities:**

- User Experience: Focus on a user-friendly interface for diverse user groups.

- Feature Development: Prioritization of core features related to student performance, attendance, and engagement tracking.

- Data Security and Privacy: High priority on securing sensitive student information.

- Scalability and Adaptability: Ensuring the system can grow and adapt to changing educational and technological landscapes.

- Quality Assurance and Stakeholder Collaboration: Emphasis on thorough testing and maintaining open communication with stakeholders.

Slides 15-17: Project Delivery Methods  
 Slide 15

**Delivery Expectations:**

- Timely delivery of the SRT according to the agreed-upon project schedule.

- Incremental delivery through a website application, facilitating continuous feedback and iterative improvements.

- Regular updates and demonstrations to keep stakeholders informed about the project's progress.

- Final delivery to align closely with outlined specifications, meeting functionality, usability, and performance expectations.

Slide 16

**Customer Requirements for System Deployment:**

- Compatibility with various operating systems (OS agnostic), ensuring broad accessibility.

- Minimal hardware requirements, ensuring the tool can operate efficiently on the customer's existing devices.

- Software requirements include seamless integration with the customer's student database, and support for data import via CSV and Excel.

Slide 17

**Security Measures:**

- Implementation of industry-standard authentication protocols and encryption measures.

- Ensuring data integrity and security throughout the transfer from database to application.

- Compliance with data protection regulations, maintaining the highest standards of data privacy.

Slides 18-19: Evaluation, Selection of Technology and Tools

Slide 18

**Database Technologies:**

- SQL Database: Using MySQL for managing current student data.

- NoSQL Database: Implementing MongoDB for its scalability and flexibility.

**User Interface Design:**

- GUI: Developed with PyQt6 for a responsive and intuitive user interface.

**Data Processing and Analysis:**

- Pandas: Utilized for efficient data manipulation and ETL (Extract, Transform, Load) procedures.

- Scikit-learn: Employed for building machine learning models, crucial for analytical insights.

Slide 19

**Web Development:**

- Django: Chosen for web application development due to its robustness and scalability.

**Visualization and Modeling:**

- Seaborn: Used for creating visually appealing and informative data visualizations.

- Machine Learning Models: Including logistic regression and ensemble learning for insightful data analysis.

**Additional Tools and Libraries:**

- Selection of additional tools and libraries based on their ability to meet project requirements and their compatibility with the overall technology stack.

Slides 20-21: Agile Team Formation, Responsibilities, and Implementation Iterations

Slide 20

**Team Formation and Responsibilities:**

Adam Carrigan: Tester, Developer, Operations, Technical and Domain Expert.

James Gilligan: Architect, Technical and Domain Expert.

Cody Lepp: Product Owner, Developer, UX Designer.

Adam Mason: Developer Ops, Stakeholder Relations.

Karen Ross: Project Manager/Scrum Master, Developer, Developer Ops.

Dratin Wood: Developer, Developer Ops, Stakeholder Relations.

**Agile Process Implementation:**

- Adaptation of Agile methodologies for iterative development and flexibility in project management.

- Regular team meetings for progress assessment and task coordination.

- Clear assignment of responsibilities and roles for efficient workflow and accountability.

Slide 21

**Implementation Iterations:**

- Planned approach for executing the project in 4 iterations over eight weeks.

- Each iteration includes specific features to be developed and tested.

- Final iteration to focus on project presentation, final documentation, and user acceptance testing.

**Collaboration and Communication:**

- Emphasis on open communication and collaboration among team members.

- Scheduled daily meet-ups for workload discussion and goal alignment.

- Use of collaboration tools and documentation to maintain project continuity and knowledge sharing.

Slide 22: Conclusion

**Summary of the Project:**

- Recap the main goal of the SRT project: Enhancing student retention in educational institutions through data-driven insights and analytics.

- Highlight the project's innovative approach in bridging traditional educational methods with modern analytical techniques.

**Team's Role and Collaboration:**

- Emphasize the diverse expertise and roles of Team Echo, contributing to the multifaceted development of the SRT.

- Acknowledge the collaborative efforts and Agile methodology that guided the project towards its objectives.

**Expected Impact and Benefits:**

- Reiterate the expected outcomes: Improved student engagement and retention rates.

- Discuss the potential for the SRT to transform educational strategies and support decision-making in educational institutions.

**Future Directions:**

- Briefly mention the possibilities for future enhancements or expansions of the SRT project.

- Express the team's commitment to continuous improvement and adaptation to changing educational needs.

Slide 23: Questions

**Closing Remarks:**

- Thank the audience for their attention and express readiness to answer any questions.

- Acknowledge any mentors, advisors, or contributors who played a significant role in the project.