

# C&I Doctoral Tracker

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Team What's Up Doc

WHAT'S  
UP DOC



## Meet the Team:

- Adam Larson (Team Lead)
- Brandon Shaffer
- Eddie Lipan
  - Special thanks to mentors Tom, Ani, and CS Faculty Member Dr. Michael Leverington



## Meet the Client:

- Dr. Gretchen McAllister, Ph.D.,  
Coordinator of the NAU Curriculum  
and Instruction (C&I) doctoral  
program
  - Aided by Michele Benedict,  
Administrative Services Assistant



# Problem Statement:

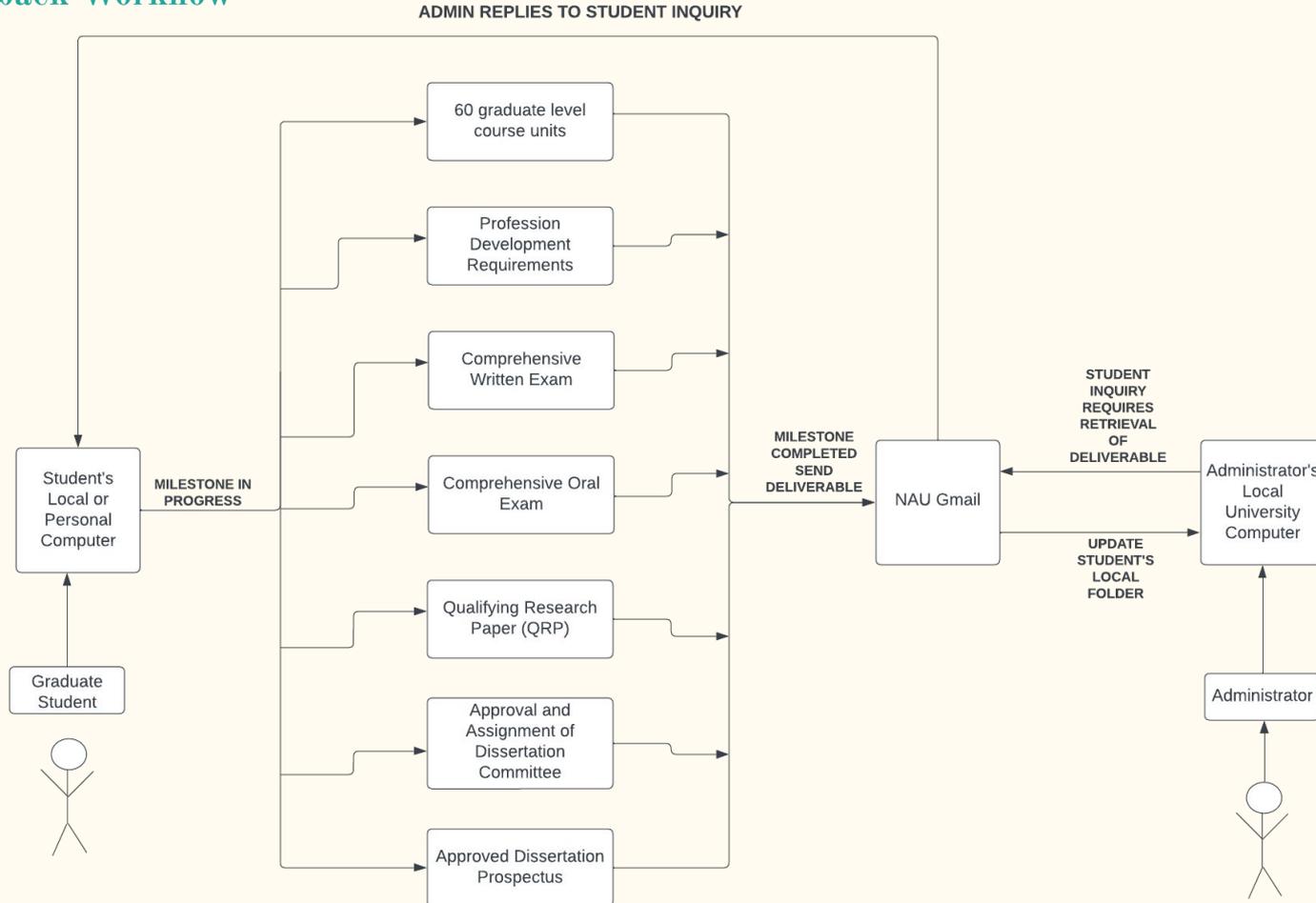
3.1 million graduate students attended universities across the United States.

- **Learning Management System (LMS)** such as Blackboard Learn or Canvas are generally used to manage undergraduate classwork and grades.
- However, as graduate work becomes more rigorous and less quantifiable, managing the program through a standard LMS is not feasible.
- NAU C&I doctoral program's current feedback process is inefficient! Workflow highlighted on next slide.



LAST ACTIVITY	GRADE
Jan 21, 2022 2:48 PM GRADED	<b>765862</b>
Feb 2, 2022 9:30 PM GRADED	<b>13.00</b> /16
Feb 9, 2022 11:27 AM GRADED	<b>12.00</b> /19
Feb 11, 2022 11:48 AM GRADED	<b>20.00</b> /23
Jan 19, 2022 4:29 PM GRADED	<b>20.00</b> /20
Feb 11, 2022 3:22 PM GRADED	 <b>117.00</b> /125

# Current Feedback Workflow



# Solution Overview:

- A College of Education (COE) **website application** that manages and tracks graduate student milestones up until candidacy.
  - **Problem:** Data entry is time consuming
  - **Solution:** Place data entry into the students' hands by automating document upload
  
  - **Problem:** Difficult process for students to view milestone progress
  - **Solution:** Make the website application easily accessible with an intuitive interface
  
  - **Problem:** Insufficient reporting
  - **Solution:** Provide admins with easy ways to sort and view the progress of individual students, individual milestones, or the entire program

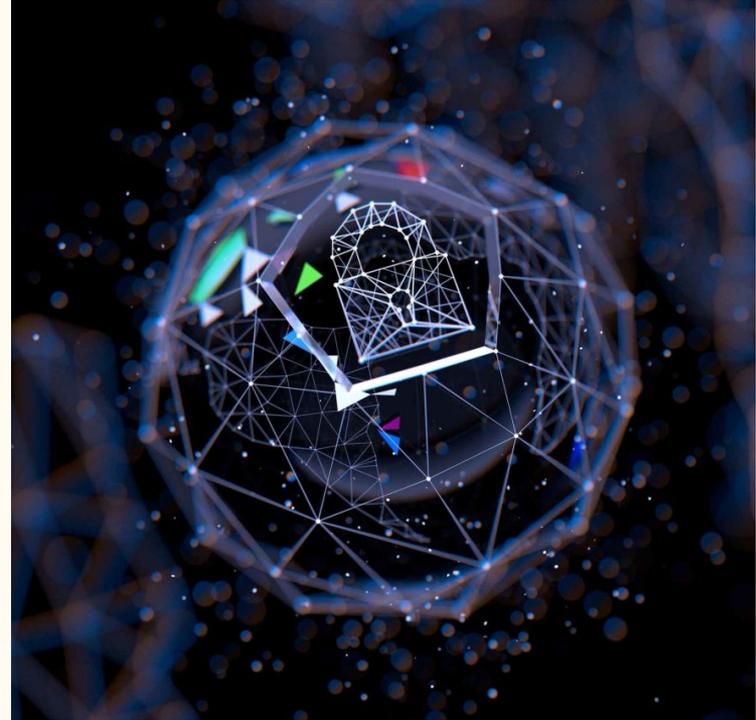
# Key Requirements

- Research
  - Client/Admin
  - Interview current students
- Accessibility
  - Cultural
  - Disability
  - Familiarity
- Requirements
  - Functional
  - Performance
  - Environmental Constraints



# Key Requirements

- **Functional**
  - Display interface
  - File upload and download
  - NAU login
- **Performance**
  - Data protection
  - Stability
  - Response time
- **Environmental Constraints**
  - NAU login - Google
  - Internet Connection
- Adjust to meet requirements with progression



# Key Requirements

- File upload and download
  - Upload
    - Framework receives file
      - Creates student folder if not present
      - Saves file to student folder
  - Download
    - Framework returns requested document(s)
      - User selected location



# Feasibility

- **Database**
  - MySQL
- **Service**
  - Spring
- **User Authentication**
  - Google Authentication Services
- **User Interface**
  - JavaScript & HTML



# Risks

- **Database Losing Files**
  - Database Backups
- **NAU Creating a Competing Application**
  - Transfer Friendly
- **Unauthorized User Access**
  - Personal Responsibility
  - Google Security
  - NAU Two-Factor Authentication

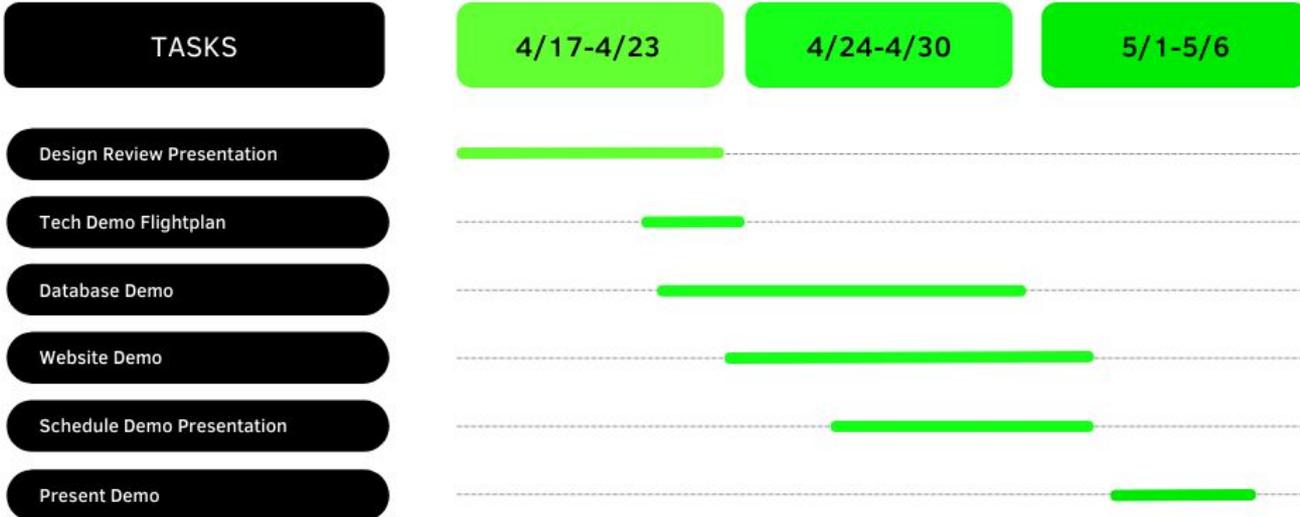


Blackboard





# Gantt Chart



# Closing and Logistics:

Team What's Up Doc is diligently working to solve the inefficiencies present within the C&I doctoral program feedback process. Through an intuitive COE website application, we aim to:

- Relieve Michele of her data entry and acquisition duties
- Facilitate an easy, motivating, and informative way to manage/track milestones
- Adhere to COE Authentication and Security measures
- Provide more detailed reporting

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