

Byte Squad – Project 2 Midterm Progress Report

Team Members: Vanessa Gutierrez (Team Lead & Backend/API), Edward Figueroa (Backend/Metadata Schema), Charles Marsala (Frontend), Kyle Fillhart (Frontend),

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1. Project Overview

The team is developing a MoMA-style Art Gallery integrated with FGCU's Dataverse. The system allows users to browse, filter, and view metadata for artworks stored in the university's repository. It uses a React + TypeScript + Tailwind CSS frontend and leverages Dataverse APIs for data retrieval.

Prototype link: <https://jasper-mask-69789565.figma.site/>

2. Development Progress

- Backend / API Integration:
 - Integrated FGCU Dataverse API and implemented search by filter feature.
 - Defined metadata schema for each art piece.
 - Verified connection with APIs and metadata schema.
- Frontend Development:
 - Built React gallery interface with filters (year, artist, genre, medium) using Figma Make.
 - Added pagination for faster page loading.

3. System Architecture

Three-tier architecture: React frontend → Dataverse API middleware → FGCU Dataverse database. Data flows seamlessly through RESTful API calls.

4. Software Development Process

Our group used the Agile methodology with weekly sprints managed on Trello. Currently completed up to Week 5 (Rough Draft Milestone) of our Week-By-Week plan: prototype integrates most functional features; currently working on implementing a download button for art pieces, adding an admin workflow, and adding multimedia playback.

5. Current Status (as of Oct 26)

- Core Dataverse connection established
- Search & filter system functional
- Metadata display and pagination completed

6. Next Steps

Upcoming work (Weeks 6–8):

- Implement download button
- Add basic admin workflow
- Add multimedia playback.
- Improve UI/UX design.
- Conduct performance testing.
- Prepare demo video and report draft.

7. Challenges & Lessons Learned

- Dataverse setup complexity led to alternative access exploration.
- API synchronization required clear documentation.
- Agile sprints and Trello improved workflow tracking and issue resolution.

8. Summary

The project is on track with major features implemented before the midterm presentation. The prototype demonstrates Dataverse integration, a functional search/filter system, and a strong UI foundation. Next stage focuses on completing functional requirements and expanding prototype features for the final delivery by early December.