

## Team05-Appfolio-Vision Statement

**Project Title:** GauchoBuddy

**Team Name:** Gold Cats

**Team Lead:** Vince Nguyen

**Team Scribe:** Dan Le

### **Members:**

- Dan Le ([dantle@ucsb.edu](mailto:dantle@ucsb.edu))
- Vince Nguyen ([vincehnguyen@ucsb.edu](mailto:vincehnguyen@ucsb.edu))
- Binyu Zhong ([binyu@ucsb.edu](mailto:binyu@ucsb.edu))
- Daniel Li ([zeyangli@ucsb.edu](mailto:zeyangli@ucsb.edu))
- Yufei Song ([yufei\\_song@ucsb.edu](mailto:yufei_song@ucsb.edu))

### **Project info:**

The objective of this project is to enhance the existing Gold website at UCSB by incorporating additional features to assist students in making informed decisions when selecting courses. The tool will provide students with comprehensive information on course details, grade distributions, professor ratings, and the option to connect with peers enrolled in the same course.

### **Project Milestones:**

#### **Phase 1: Web app**

| Priority | Feature  |
|----------|--|
| P0       | An advisor LLM chatbot to help with generic advisor questions                                |
| P0       | List of accurate grade distributions   |
| P1       | Research proof of concepts for chrome extension (adding UI on top, pulling events from gold) |
| P2       | Rate and common level of hardness of professor (use language models generate main point)     |
| P2       | Group people with same class into group chat   |

## Phase 2 Chrome Extension

| Priority | Feature  |
|----------|--|
| P0       | Gold extension to add chatbot to existing Gold Website                                   |
| P0       | Gold extension to add panel for grade distributions to existing Gold Website             |
| P1       | Rate and common level of hardness of professor (use language models generate main point) |
| P1       | Group people with same class into group chat   |

### Project Outcome:

**Gold Extension Integration:** Develop and integrate an extension into the current Gold website to incorporate new features including grade distribution seamlessly in course info tab and ensure a user-friendly experience. Implement the feature that allows students to view the historical grade distributions of each course, enabling them to make more informed decisions regarding their course selections.

If an extension is not feasible, we will build a new website incorporating the features.

**Advisor LLM Chatbot Integration:** Develop an intelligent chatbot using the latest language models to provide automated assistance for generic advisor-related inquiries, thereby reducing the burden on academic advisors and ensuring students have access to timely and accurate information. The LLM will use data from UCSB Grades dataset as well as advisor information from UCSB websites.

**Professor Rating System:** Create a mechanism for students to rate professors and provide feedback on their teaching style, workload, and overall approach. Use sophisticated language models to generate a concise summary of each professor's common level of difficulty and overall rating.

**Group Chat Integration:** Implement a group chat feature that allows students enrolled in the same course to connect and communicate with each other. This will facilitate discussion, collaboration, and the sharing of resources among peers.

### Implementation:

- Frontend
  - React.js
  - Javascript
  - HTML/CSS
- Backend:

- Python
  - Flask
- Deployment:
  - Docker
- LLM:
  - LangChain
- APIs:
  - Chrome extension APIs, UCSB APIs + Dataset
- Database Management:
  - MongoDB
- Productivity:
  - Version Control: Git + Github
  - Project management: Trello <https://trello.com/b/WANCIDGM/guachobuddy>
  - Documentation: Google docs