Profile Management

- **Requirement:** Users shall be able to create a new academic profile or open an existing one.

1. Design the startup screen.

2. Implement new profile creation.

3. Implement existing profile loading.

4. Store profile data.

5. Implement profile deleting.

6. Handle invalid or missing files.

Navigation & Sections

- **Requirement:** Users shall be able to navigate between multiple sections such as current semester, academic summary, etc.

1. Design main window layout with a navigation system.

2. Implement navigation logic.

3. Ensure profile data persist across sections.

4. Allow return to startup page.

Curriculum Management

- **Requirement:** Users shall be able to add, edit, and delete courses.

  1. Implement course data structure.
  2. Implement add, edit, and delete course functionality.

- **Requirement:** Users shall be able to assign prerequisite relationships between courses.

  1. Implement add and delete prerequisite functionality.
  2. Warning if prerequisite rules are violates.

- **Requirement:** Users shall be able to input, track, and mark completion of internship.

  1. Implement add and delete internship functionality.
  2. Implement internship requirement tracker.

Visualization & Planning

- **Requirement:** The system shall visualize courses using color-coded graphs:

    1. Implement course calendar and exam notifier.
    2. Implement semester-based timeline table.
    3. Implement prerequisite tree.

Academic Progress & Analysis

- **Requirement:** The system shall display academic progress based on completed courses.

    1. Show list of all completed, in-progress, and failed courses.
    2. Show credit completion percentage.

- **Requirement:** The system shall simulate GPA based on projected grades.

    1. Implement GPA simulation tool.

- **Requirement:** The system shall display GPA trends over semesters.

    1. Implement GPA & credit trend graph.

Data Management

- **Requirement:** All data shall be stored locally and persist between sessions.

    1. Implement save & load functionality.
    2. Define schema for saving user data.
    3. Save user settings.

- **Requirement:** Users shall be able to import course templates.

    1. Prepare course templates.

User Interface

- **Requirement:** The application shall include a dark mode option.

    1. Add theme support.

- **Requirement:** Increase accessibility features.

    1. Design responsive user interface.
    2. Add keyboard shortcuts.