CPSC-6177
HW1 - Requirement Analysis

By:
Ashlesha Singh
Khushi Jani
Utku Binkanat
Reid Roberts

Table of Contents

User Stories

User Story 1: Plan Setup Wizard

Author:	Team
Summary:	Step-by-step setup for inputs and start term
Description:	Guide users to (1) select DegreeWorks sample PDF, (2) pick Graduate Study Plan/track, (3) set Program Map source, (4) choose start term and max credits.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	High Priority

User Story 2: Track selection (core courses only)

Author:	Team
Summary:	Limit scope to Software Systems (Undergrad) and core courses.
Description:	Only show and plan required/core courses for the selected track; electives are out of scope.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	High Priority

User Story 3: Student ID/Name for labeling only

Author:	Team
Summary:	Use student ID/Name solely for report headers.
Description:	Do not attempt DegreeWorks retrieval by ID; parse "still-needed" courses from sample PDFs provided for implementation/testing.
Hours Planned:	2
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	High Priority

User Story 4: Parse DegreeWorks sample PDFs

Author:	Team
Summary:	Extract "still-needed" required courses.
Description:	Read the sample PDF to produce a confirmable list of remaining core courses before planning.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Medium Priority

User Story 5: Load Graduate Study Plan

Author:	Team
Summary:	Use the plan as sequencing guidance.
Description:	Parse the Graduate Study Plan (revised) to suggest typical order/semester placement, complementing prerequisite rules.
Hours Planned:	10
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Medium Priority

User Story 6: Program Map scraping/import

Author:	Team
Summary:	Program Map scraping/import
Description:	Scrape/ingest the CSU Program Map to build term-offering data; no official downloadable file exists, so scraping is expected.
Hours Planned:	10
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Medium Priority

User Story 7: Prerequisite Graph parser

Author:	Team

Summary:	Build a DAG from PrerequisiteGraph-Software_Systems2019-2020.
Description:	Parse the provided prerequisite document into a DAG (or equivalent structure) used by the planner and validator.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 8: Prerequisite Validation

Author:	Team
Summary:	Validate the plan against the graph; optional backup crawl.
Description:	Use the prerequisite graph as the primary source to check ordering/eligibility. If a needed edge/detail is missing, optionally supplement using CPSC course descriptions as a backup.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 9: Auto-generate semester plan

Author:	Team
Summary:	Produce a term-by-term plan until graduation.
Description:	Combine remaining courses, Program Map offerings, and DAG constraints to generate a recommended sequence; allow start term, summer usage, and max credits. Export-ready.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 10: Handle missing/unknown offerings cleanly

Author:	Team
Summary:	Gracefully flag or skip where data is absent.

Description:	If Program Map lacks a course's term, consult the prerequisite graph's offering hints; if still unknown, let users set "TBD" or skip. Ignore non-core (e.g., political/chem/physics/language) courses.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 11: Export plan to Excel (XLSX)

Author:	Team
Summary:	Spreadsheet with terms, courses, and totals.
Description:	Create an Excel file listing each term, courses, and credit totals—matching the expected output format.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 12: Sources & cache panel

Author:	Team
Summary:	Manage locations for inputs and refreshes.
Description:	Configure DegreeWorks sample paths, Program Map URLs, and the prerequisite graph file; show last fetch and logs.
Hours Planned:	5
Hours Actual:	N/A
Coder(s):	TBD
Tester(s):	TBD
Reviewer(s):	TBD
Status:	Not Started
Priority:	Low Priority

User Story 13: Extensible to future tracks

Author:	Team
Summary:	Add new tracks via config, not code.

Description: Support dropping in new prerequisite
                                    files/schedules for future tracks without
                                    code changes.
Hours Planned: 5
Hours Actual: N/A
Coder(s):   TBD
Tester(s):   TBD
Reviewer(s):   TBD
Status: Not Started
Priority: Low Priority