After Class Diagram

Util Menu OutputMenu(): void - listStudents(Map<String, Student>): void listCourses(Map<String, Course>): void menuLoop(Map<String, Student>, Map<String, Course>): voidcreateMenu(Map<String, Student>, Map<String, Course>): void

Output + print(String): void+ println(String): void # Start(): void # Exit(): void

UI

~ audit: Audit

+ addStudentUI(Scanner, Map<String, Student>): void + addCourseUI(Scanner, Map<String, Course>): void + enrollUI(Scanner, Map<String, Course>): void + dropUI(Scanner, Map<String, Course>): void + listStudents(Map<String, Student>): void + listCourses(Map<String, Course>): void

Parser split(String): String[]parseStudent(String): Student + parseCourse(String): Course + parseEnrollment(String): String[]

EnrollmentException - audit: Audit {readOnly} + EnrollmentException(String):

ValidationException - audit: Audit {readOnly} + ValidationException(String):

FileIntegrity checkAndCreateCSV(String): void

Validate - result: Boolean - CHAR\_LIMIT: int {readOnly} + audit: Audit + Validate\_String(String, String): void + getResult(): Boolean

- CODE\_MATCH: String {readOnly} - TITLE\_MATCH: String {readOnly} - CAPACITY\_MATCH: String {readOnly} + Validate\_Code(String): boolean + Validate\_Title(String): boolean + Validate\_Capacity(String): boolean

ValidateCourse

ValidateStudent - BANNERID\_MATCH: String {readOnly} - NAME\_MATCH: String {readOnly} - EMAIL\_MATCH: String {readOnly} + ValidateID(String): boolean + ValidateName(String): boolean + ValidateEmail(String): boolean

Model Course - code: String - title: String - capacity: int - roster: List<String> - waitlist: List<String> + getCode(): String + getTitle(): String + getCapacity(): int + getRoster(): List<String>+ getWaitlist(): List<String> + setCode(String): void + setTitle(String): void + setCapacity(int): void

+ setRoster(List<String>): void

+ setWaitlist(List<String>): void

Student - id: String - name: String - email: String + toString(): String + getId(): String + getName(): String + getEmail(): String + setId(String): void + setName(String): void + setEmail(String): void

Main - STUDENTS\_CSV: String {readOnly}
- COURSES\_CSV: String {readOnly}
- ENROLLMENT\_CSV: String {readOnly}
- InCSV: InCSV {readOnly}
- OUTCSV: InCSV {readOnly} - checkFileIntegrity: FileIntegrity {readOnly} + main(String[]): void- seedDemoData(Map<String, Student>, Map<String, Course>): void

App

<<Interface>> CourseRepository ~ loadCourses(Map<String, Course>, String): void ~ saveCourses(Map<String, Course>, String): void <<Interface>> EnrollmentRepository

Repo

<<Interface>> StudentRepository - loadStudents(Map<String, Student>, String): void ~ saveStudents(Map<String, Student>, String): void

- loadEnrollment(Map<String, Course>, String): void

~ saveEnrollment(Map<String, Course>, String): void

RegisrationService - audit: Audit {readOnly}- parser: Parser {readOnly} + loadAll(Map<String, Student>, Map<String, Course>, InCSV): void + saveAll(Map<String, Student>, Map<String, Course>, OutCSV): void + loadStudents(Map<String, Student>, String): void + saveStudents(Map<String, Student>, String): void + loadCourses(Map<String, Course>, String): void
+ saveCourse(Map<String, Course>, String): void
+ loadEntrollments(Map<String, Course>, String): void

Service

Audit ~ auditLog: List<String> + add(String): void + write\_logfile(): void

+ saveEnrollments(Map<String, Course>, String): void