HengHeng Class Diagram

Astronomer

- Astronomer ID : String
- name: string
- email: string
- Name Science plan : String

+ createSciencePlan(title: string, details: string): SciencePlan
+ submitSciencePlan(plan: SciencePlan): void

Science Plan

- science plan ID : string
- title: string
- creator: Astronomer
- submitter: string
- funding: float
- objective: string
- starsSystem: string
- schedule: DateTime
- telescopeLocation: string
- dataProcessingRequirements : dataProcessingRequirements
- imageProcessing: ImageProcessing
- status: string

+ saveSciencePlan() : void

Submit

- Astronomer ID : String
- Submitor ID : String
- Name Science plan : String

+ Submit(plan: SciencePlan): String

Submitor

- Submitor ID : String
- Name : String
- Email : String

+ checkCompleteness(plan: SciencePlan): boolean

ImageProcessing

- blackAndWhite: boolean
- color: boolean
- contrast: boolean
- brightness: boolean
- saturation: boolean

DataProcessingRequirement

- fileType: string
- fileQuality: string

SciencePlanDatabase

- plans: List<SciencePlan>
- databaseName: string
- databaseSize: string
- databaseLocation: string

+ saveSciencePlan() : void
+ addPlan(plan: SciencePlan): void
+ getPlanByTitle(title: string): SciencePlan

Supporter

- Supporter ID : String
- Name : String
- Email : String

+ executeTests(plan: SciencePlan): void
+ reportResult(plan: SciencePlan): boolean

Science Observer

- Science Observer ID : int
- Science Plan ID : int
- Name : String
- Email : String
- ExperienceYears: int

+ ValidateSciencePlan: boolean
+ MonitorProgress : void

Gemini's System

+ sciencePlanDatabase: SciencePlanDatabase

+ checkDuplicateTitle(title: string): boolean
+ callTestFiles(): void