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Engineering Principles: Research, Design, and Build - Period 7

February 17, 2021

API Behavior Categories and UML

- User Interface
 - o inputCityState()
 - inputClockFormat()
 - o selectTimeOfDay()
 - selectMoonInfo()
 - selectCelestialEvent()
 - displayErrorMessage(msg)
 - displaySelectedInfo()
- InfromationFetcherRequestAndResponse
 - validateCityState()
 - o setCityState()
 - setClockFormat()
 - setTimeOfDay()
 - getTimeOfDay()
 - o setMoonInfo()
 - getMoonInfo()
 - setCelestialEvent()
 - getCelestialEvent()
 - o getInfo()
 - o getSunriseTime()
 - o getSunsetTime()

UserInterface

+ inputCityState() : String + inputClockFormat() : Int

[12, 24]

+ inputDate() : LocalDate

+ selectTimeOfDay(): boolean + selectMoonInfo(): boolean + selectCelestialEvent(): boolean

+ displayErrorMessage(msg) : void

+ displaySelectedInfo(): void

Information Fetcher Request And Response

CityState : StringClockFormat : IntTimeOfDay : CharMoonInfo : CharCelestialEvent : Char

- URL: String (https://api.sunrise-sunset.org/json)

SunriseTime : LocalTimeSunsetTime : LocalTime

- validateCityState(String CityState) : String

+ setCityState(String CityState) : String

+ setClockFormat(Int ClockFormat): Int

 $\hbox{-} \ validate Date (Local Date \ Date): Local Date \\$

+ setDate(LocalDate Date) : LocalDate

 $+\ set Time Of Day (Char\ Time Of Day): Char$

+ getTimeOfDay() : boolean

+ setMoonInfo(Char MoonInfo) : Char

+ getMoonInfo(): boolean

+ setCelestialEvent(Char CelestialEvent) : Char

+ getCelestialEvent() : boolean

+ getInfo(): InfromationFetcherRequestAndResponse

+ getSunriseTime(LocalTime) : InfromationFetcherRequestAndResponse

+ getSunsetTime(LocalTime) : InfromationFetcherRequestAndResponse