

CustomWaypointRenderer
+ CustomWaypointRenderer():
- mappalcon: Map<String, Icon>
+ paintWaypoint(Graphics2D, JXMapView, Waypoint): void

GTFSFetcher
+ GTFSFetcher():
- GTFS_RT_URL: String
+ fetchBusStopPositions(): Set<BusWaypoint>
+ fetchBusPositions(String): Set<BusWaypoint>

OnlineStatusChecker
+ OnlineStatusChecker():
- TIMEOUT: Duration
- DEFAULT_URL: String
+ isOnline(String): boolean
+ isOnline(): boolean

Favourites
+ Favourites():
- favouriteStops: List<String>
- favouriteRoutes: List<String>
+ saveFavouriteRoutesToFile(String): void
+ addRoute(String): void
+ addStop(String): void
+ loadFavouriteStopsFromFile(String): void
+ saveFavouriteStopsToFile(String): void
+ getFavouriteRoutes(): List<String>
+ loadFavouriteRoutesFromFile(String): void
+ removeStop(String): void
+ removeRoute(String): void
+ getFavouriteStops(): List<String>

BusWaypoint
+ BusWaypoint(double, double):
+ BusWaypoint(double, double, String, String):
+ BusWaypoint(double, double, Trip):
- position: GeoPosition
- routeType: String
- trip: Trip
- label: String
+ getTrip(): Trip
+ getPosition(): GeoPosition
+ getLabel(): String
+ getRouteType(): String

StaticGTFSDownloader
+ StaticGTFSDownloader(String, String, Path):
- folderPath: Path
- fileURL: String
- httpClient: HttpClient
- md5URL: String
- localFile: Path
+ unzipFile(Path, Path): void
+ isUpToDate(): boolean
- downloadAsString(String): String
+ downloadAndUnzipIfNeeded(): boolean
- getFileNameFromURL(String): String
- calculateMD5(Path): String

GlobalParameters
+ GlobalParameters():
+ FRAME_TITLE: String
- FOLDER_PATH: Path
+ TIMER_DELAY_MS: int
+ BUTTON_SIZE: Dimension
+ ROME_CENTER_LAT: double
+ ROME_CENTER_LON: double
- MD5_URL: String
+ PAN_DELTA: double
+ SEARCH_BUTTON_SIZE: Dimension
- mapZoom: int
+ LEFT_PANEL_COLOR: Color
+ FRAME_WIDTH: int
- NAVIGATION_PANEL_COLOR: Color
- FILE_URL: String
+ FRAME_HEIGHT: int
+ getMd5URL(): String
+ getFolderPath(): Path
+ setMapZoom(int): void
+ getFileURL(): String
+ getMapZoom(): int

StopTimes
+ StopTimes():
- tripIdMap: Map<String, List<StopTime>>
+ selectedStopTimes: List<StopTime>
- stopIdMap: Map<String, List<StopTime>>
- listOfStopTimes: List<StopTime>
+ AddStopTime(StopTime): void
+ getStopTimesFromStopId(String): List<StopTime>
+ getStopTimesFromStopId(String, long): List<StopTime>
+ getStopTimesFromTripId(String, long): StopTime
+ loadFromFile(String): void

StopTime
+ StopTime(String, String, String, String, String):
- arrivalTime: String
- stopId: String
- shapeDistTraveled: String
- tripId: String
- stopSequence: String
- arrivalDateTime: LocalDateTime
+ getStopSequence(): String
+ getStopId(): String
+ getArrivalDateTime(): LocalDateTime
+ getShapeDistTraveled(): String
+ getArrivalTime(): String
+ getTripId(): String

Stops
+ Stops():
- listOfStops: List<Stop>
+ searchStop(String): Stop
+ loadFromFile(String): void
+ AddStop(Stop): void
+ searchStopList(String): List<Stop>
+ Print(): void

Stop
+ Stop(String, String, String, String):
- stopLon: String
- stopName: String
- stopLat: String
- stopId: String
+ getStopName(): String
+ getDoubleStopLon(): double
+ print(): void
+ getStopId(): String
+ getDoubleStopLat(): double
+ getStopLat(): String
+ getStopLon(): String

Routes
+ Routes():
- routeMap: Map<String, Route>
+ addRoute(Route): void
+ searchRoute(String): Route
+ print(): void
+ loadFromFile(String): void

Trips
+ Trips():
- listOfTrips: List<Trip>
+ getSize(): int
+ loadFromFile(String): void
+ Print(String): void
+ getRouteIdFromTripId(String): String
+ getTripListFromRouteId(String): List<Trip>
+ Print(): void
+ AddTrip(Trip): void
+ searchTrip(String): Trip

Route
+ Route(String, String):
- routeType: String
- mappaTypeDesc: Map<String, String>
- routeId: String
+ getRouteTypeDesc(): String
+ getRouteId(): String
+ getRouteType(): String

Trip
+ Trip(String, String, String, String):
- routeId: String
- tripHeadSign: String
- targetStopSequence: int
- tripId: String
- currentStopId: String
- currentStopSequence: int
+ getTripId(): String
+ getCurrentStopId(): String
+ getRouteId(): String
+ setCurrentStopId(String): void
+ getTripHeadSign(): String
+ getCurrentStopSequence(): int
+ getTargetStopSequence(): int
+ setCurrentStopSequence(int): void
+ setTargetStopSequence(int): void

Main
+ Main():
- stopTimer: Boolean
+ allStops: Stops
- gp: GlobalParameters
- favListModel: DefaultListModel<String>
- currentStopId: String
- tripTable: JTable
- stopListModel: DefaultListModel<String>
- tableScroll: JScrollPane
+ allRoutes: Routes
- allStopTimes: StopTimes
- isOnline: boolean
- statusLabel: JLabel
- currentRouteId: String
- stopList: JList<String>
- favList: JList<String>
+ allTrips: Trips
- currentFoundStop: Stop
- leftPanel: JPanel
- timer: Timer
- favourites: Favourites
- redCircleIcon: Icon
- greenCircleIcon: Icon
- mapView: JXMapView
- resultArea: JTextArea
- stopScroll: JScrollPane
- createZoomPanel(): JPanel
- showStop(String): void
- searchAndShowRoute(String): boolean
- updateBusPositions(): void
- searchAndShowRouteOffline(String): boolean
- showStopOffline(String): void
- updateStatus(): void
- createLeftPanel(): JPanel
- searchAndShowStop(String): void
+ main(String[]): void
- panMap(double, double): void
- createButton(String): JButton
- createNavigationPanel(): JPanel
- refreshTable(Set<BusWaypoint>): void
- displayBusWaypoints(Set<BusWaypoint>): void