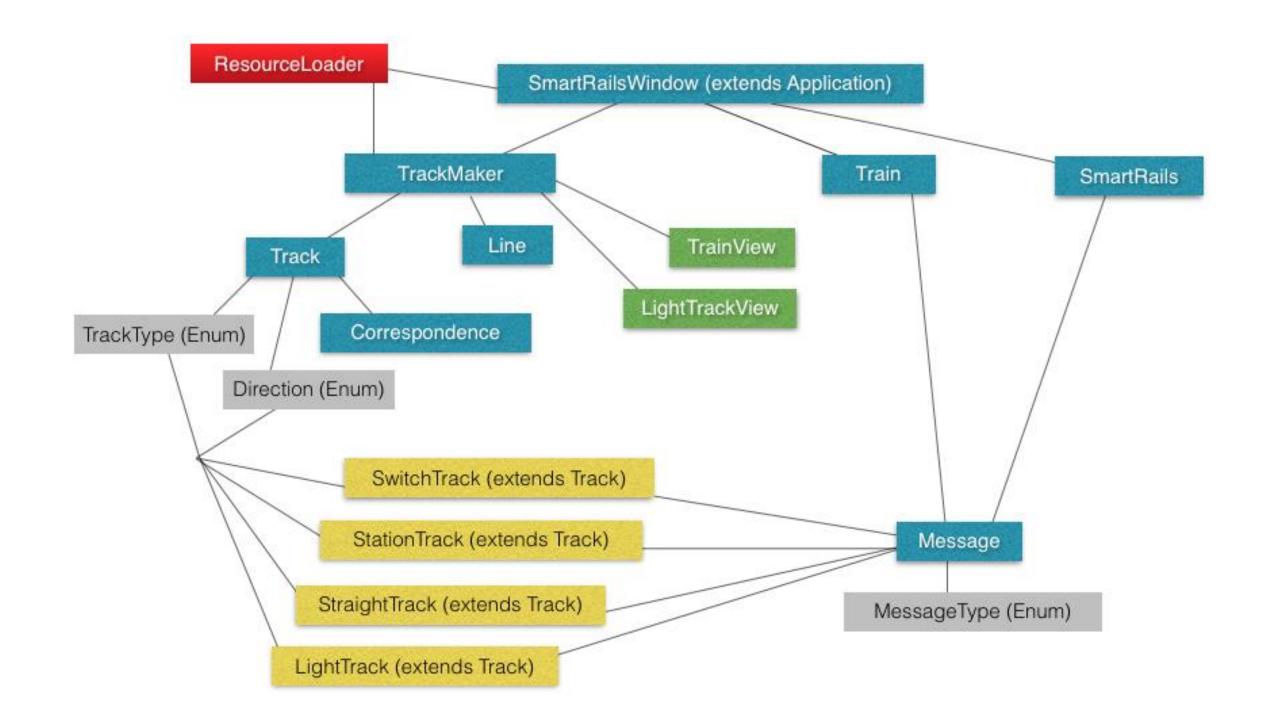
# SmartRails

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# GUI Package

#### SmartRailsWindow

- Main()
- Start()
- OpeningScene()
- ScheduleScene()
- TrainScene()
- SetTrainAtStation()
- FormatButton()
- TrainSelection()
- MakeTrains()

#### LightTrackView

- LightTrackView()
- GetListener()

Contains ChangeListener with changed() method

#### TrackMaker

- TrackMaker()
- GetLines()
- GetTrainViews()
- GetLightViews()
- MakeTrack()
- MakeTrainViews()

#### TrainView (extends ImageView)

- TrainView()
- Move()

# Res Package

#### ResourceLoader (in res package)

- GetTrackImage()
- GetTrainImage()
- GetImage()
- GetMediaPlayer()
- GetTitle()

# SmartRails Package

## Direction (Enum)

- LEFT
- UP
- RIGHT
- DOWN
- opposite

#### SmartRails

- SmartRails()
- SetDestination()
- Run()

# Train\_and\_Track Package

## Correspondence (in Message Subpackage)

- Correspondence (constructor)
- SetSwitchValue()
- GetSwitchValue()
- MessageBelongsHere()
- AddMessage()
- Contains()
- Print()

#### Message (in Message Subpackage)

- Message()
- IsRecipient()
- Print()
- ChangeDirection()

# MessageType (Enum – in Message Subpackage)

- SEARCH
- SECURE
- FOUND
- NOTFOUND
- SECURED
- UNSECURED
- MOVE
- FREE

- START
- LIGHTON
- LIGHTOFF
- SWITCHON
- SWITCHOFF
- ARRIVED

## LightTrack

- LightTrack (constructor)
- SetLightListener()
- ReadMessage()
- SetLightOn()
- IsLightOn()

#### Line

- Line()
- GetStartPoint()
- GetEndPoint()

#### StationTrack

- StationTrack()
- AddTrain()
- GetName()
- ReadMessage()
- MoveTrain()
- FindTrain()
- InitDirection()

## StraightTrack (extends Track)

StraightTrack

## SwitchTrack (extends Track)

- SwitchTrack()
- GetNextTrack()
- ReadMessage()
- Search()
- SaveSwitchValues()
- SecureTrack()
- FreeTrack()
- SetConnection()

- TurnSwitchOn()
- TurnSwitchOff()
- SwitchDirection()
- ChangeLight()
- IsSwitchOn()

#### Track

- Track()
- GetNextTrack()
- SetRight()
- SetLeft()
- SetTrain()
- GetTrain()
- IsOccupied()
- GetTrackType()
- MoveTrain()
- GetX()

- GetY()
- ReadMessage()
- FindCorrespondence()
- ClearCorrespondence()
- SecureTrack()
- FreeTrack()
- SendMessageToNextTrack()
- SendMessageToTrain()
- ReadNextMessage()
- Run()

#### TrackType (Enum)

- LEFT\_UP\_SWITCH
- LEFT\_DOWN\_SWITCH
- RIGHT\_UP\_SWITCH
- RIGHT\_DOWN\_SWITCH
- LIGHT
- STATION
- STRAIGHT

#### Train

- Train()
- SetSchedule()
- FindRoute()
- ReadMessage()
- ReceiveMessage()
- SendMessage()
- SetDirection()
- GetDirection()

- PrintDirection()
- SetCurrentTrack()
- GetName()
- SetTrainView()
- Relocate()
- ReadNextMessage()
- Run()