



Projet de Fin d'Études ESEO 2023-2024

Réunion de lancement

Thales : Metro Network Journey Simulator

Sommaire

- I. L'équipe
- II. Le projet
- III. Gestion du projet
- IV. Product Backlog





I - L'équipe



Git Maintainer
Baptiste BELLIER



Relations Client
Alexis BONAMY



Scrum Master Marie
BORDET



Product Owner
Aurélie CHAMOULEAU



Resp. Qualité
Paul TREMOUREUX



Resp. Tests
Benoît VAVASSEUR

II - Le projet

II - Le projet

Simulateur de réseau de métro urbain

IHM en Java :

- Création des scénarios de simulations
- Gestion des zones, lignes, stations, événements...

Simulateur en Go :

- Script d'exécution de la simulation
- Création des .csv des résultats des simulations



II - Le projet





II - Le projet

Event-editor

| Event Name | Type | Event Description |
|----------------|---------|--|
| LineDelayed | Line | configure a delay between 2 stations of ... |
| StationClosed | Station | close a station |
| LineClosed | Line | close an entire line of the map |
| AttendancePeak | Station | configure a big raise of population on a ... |
| TrainHour | Line | configure a new train flow on a line |

Start Time:

...

18:25

End Time:

...

18:25

Edit distribution

choose Area distribution (%)

Tourist:

0

Student:

0

BusinessMan:

0

Worker:

0

Child:

0

Retired:

0

Unemployed:

0

Destination:

OK

Annuler

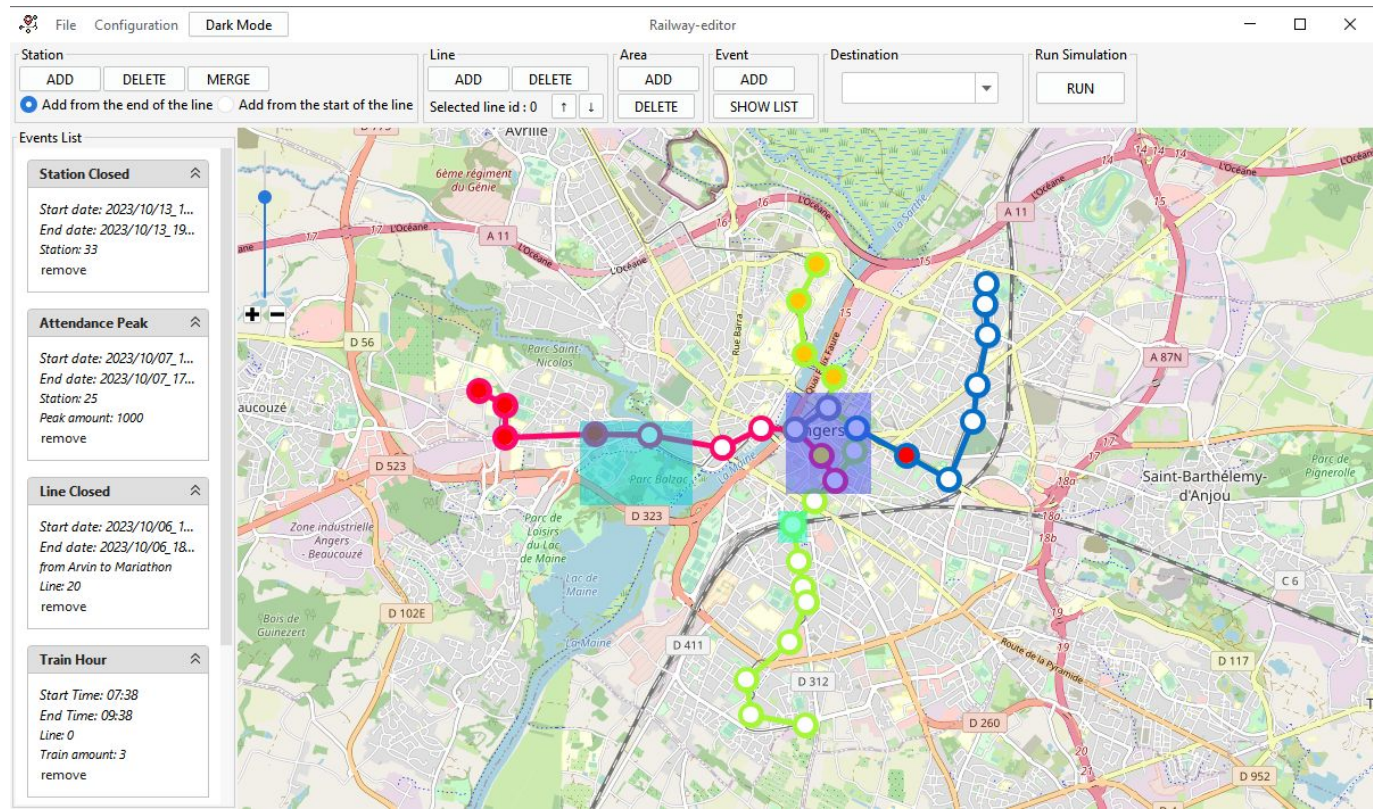
II - Le projet

```
C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulateurv2\pfe-2018-network-journey-si...
----- Metro Simulator -----
----- Verifying Config -----
advanced config file found ( C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulat
eurv2\pfe-2018-network-journey-simulator\src\configs\runThisSimulation.xml ), running with it.
loading advanced config...
base path : C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulateurv2\pfe-2018-n
etwork-journey-simulator
current path : C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulateurv2\pfe-201
8-network-journey-simulator
base path : C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulateurv2\pfe-2018-n
etwork-journey-simulator
config path : C:\Users\odial\Documents\Aurelie\ESEO\I3\PFE\pfe_railway_editor_2023_2024\eseo_railwaysimulateurv2\pfe-2018
-network-journey-simulator\src\configs\runThisSimulation.xml

-- from config.json
Number of passengers : 1000
Time start : 2018-10-12 00:00:00 +0000 UTC
Time end : 2018-10-13 00:00:00 +0000 UTC

-- from runThisSimulation.xml
Number of stations : 15
Number of lines : 2
Please, choose a day type beyond the following list (enter the corresponding number) :
1 : working day
2 : week-end
3 : bank holiday
4 : holidays
```

II - Le projet





II - Le projet



III - La gestion du projet

Notre méthodologie : en mode Scrum





Notre Definition of Done



Developed



The project compiles and run



Unit tests produced and validated



Documentation updated



Quality checked (*Sonar for Java & Go, Checkstyle for Java*)



Work checked by another team member



US validated by Product Owner



Branch merged with dev

Les réunions avec le client



Envoi d'un ODJ

J-1
17h30

Point sur les avancées de l'
équipe, nos difficultés...

J
9h30*

Envoi d'un CR

J
12h30

* Ou 8h30 suite au changement d'heure

La gestion via GitLab

Issues33

List

Board

Labels

Milestones

Merge Requests0

Wiki

Snippets

Members

Open6

[Railway Editor - 41] I want to address and fix existing bugs in the Java program, including issues related to station merging, simulation configuration saving, element positioning (and others)
#4

[Simulator - 14] I want to verify that line closures are properly simulated and handled by the system
#28

[Simulator - 9] I want to verify that station closures are properly simulated and handled by the system
#24

[Railway-Editor - 41] I want the ability to access and manage all configuration settings directly from the HMI, including simulation parameters and schedule details.
#10

TS_RED_Quality Improvement
#34

TS_SIM_Quality Improvement
#35

In development3

[Railway-Editor - 30] I want an improved and intuitive interface for creating, modifying, and deleting stations and lines within the system.
In development
#17

[Simulator - 13] I want to verify that peak hours are properly simulated and handled by the system
In development
#20

TS_RED_5_Refactorize Action Manager
In development
#33

Developped1

[Railway-Editor - 10] I want to initiate and run simulations directly from the HMI
Developped
#32

In testing0

Tested

La qualité

- Rédaction d'un PAQL (Plan Assurance Qualité Logicielle)
 - Structuration des dépôts
 - Définition de règle de qualité à respecter (nommage, versionning, modèles, ...)
 - Définition des processus utilisés
- Utilisation d'outils de contrôle qualité (Sonar, Checkstyle)
- Relecture croisée
- Génération de documentation logicielle (JavaDoc, GoDoc)

The image displays two screenshots of the SonarLint application interface, specifically the 'Report' tab. The top screenshot shows a project with 47 issues found in 13 files. The issues are categorized by severity (Error, Warning, Info) and listed with file names and issue counts. The bottom screenshot shows a larger project with 3119 issues found in 169 files, also categorized by severity and listed with file names and issue counts.

SonarLint Report: Found 47 issues in 13 files

- advancedConfig.go (3 issues)
- config.go (2 issues)
- csvCreator.go (1 issue)
- eventTimetableTrain.go (1 issue)
- map.go (8 issues)
- metroLine.go (2 issues)
- metroStation.go (3 issues)
- metroTrain.go (2 issues)
- metro_simulator.go (2 issues)
- pathStation.go (4 issues)

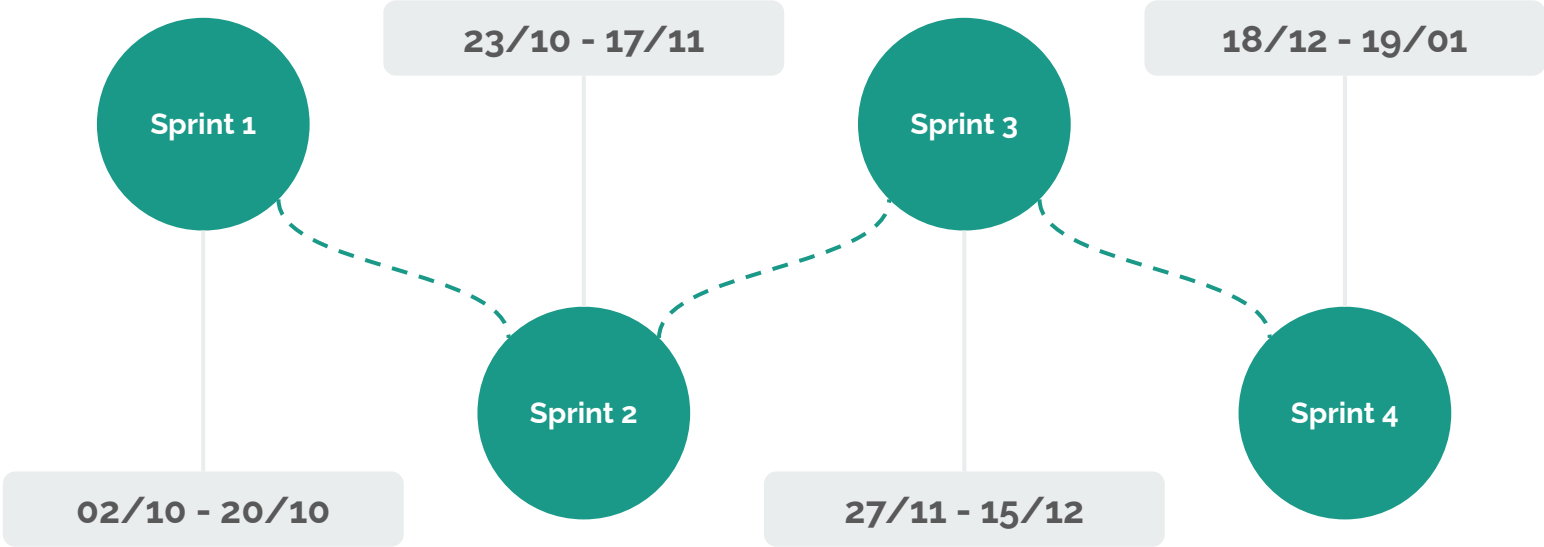
SonarLint Report: Found 3119 issues in 169 files

- AbstractOsmTileSource.java (1 issue)
- AbstractTMSTileSource.java (2 issues)
- ActionExport.java (11 issues)
- ActionManager.html (46 issues)
- ActionManager.html (18 issues)
- ActionManager.java (60 issues)
- ActionOpen.java (28 issues)
- ActionThemeMode.java (10 issues)
- Area.html (56 issues)
- Area.html (31 issues)
- Area.java (7 issues)

IV - Product Backlog



Product Backlog





Sprint 1




Sprint 1

02/10 - 20/10


Prise en main & légères améliorations



Correction des
bugs



Vérification des
fonctionnalités
clés déjà
implémentées



Amélioration de
l'interface
graphique Java

7 US

158 pts





Sprint 2




Sprint 2



23/10 - 17/11




Diversité de population & simulation d'une journée



Fermeture
nocturne des
lignes



Interface de
gestion des
events



Modification de la
population dans
zones/stations



Archivage des
configurations

10 US

211 pts

Sprint 3

Sprint 3

27/11 - 15/12

Gestion d'événements & simulation sur plusieurs jours

Implémentation
des events
(sportifs, culturels,
sociaux)

Gestion du
calendrier (simu
sur plusieurs
jours)

Affichage des
résultats de
simulation via
PowerBI

8 US

199 pts






Sprint 4



Sprint 4

18/12 - 19/01

Variations des week-ends & autres demandes



Création de
"patterns" de
week-end



Optimisation de
la mémoire



Docker



Interface web

5 US

195 pts



Des questions ?

