

I7APK projekt noter

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Train system

Freight train management system

Systemet håndterer tog management - hvilket gods er der på stationenen, hvor er der frit, og hvor kan et givent tog gøre mest nytte

Simulates a day at the train station with a given amount of cargo.

Funktionaliteter

- Togvogne er templates som tager en typelist med godstyper, med nogle constraints afhængig af lokomotiv typen
- Signals og variant bruges til at håndtere events når et nyt tog kommer ind.
- Exception safety
- Containers and algorithms: containers for platform freight objects, Algorithm to calculate possible load of a train from a given platform
- Almen template og C++11 feature brug

Classes:

Train

Has one locomotive and n carriages

Locomotive

Different types of locomotives allow various weights for the train

Carriages

Allows certain types of cargo

Cargo

Has a type and a weight and load time

Platform

Can hold one train and any number of cargo objects

Station

Has a number of platforms

CMS - Cargo Management System

Handles the loading of the trains

Event system:

Train entering station

Cargo loaded

Train leaving station