

User Manual

for

Tool Bus Schedule

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Version 1.0

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Starting Tool

To start the bus schedule tool, insert <https://bussie-on-its-way.streamlit.app/> into browser.

KPI

The tool uses a total of three metrics to determine the efficiency of a circulation. The total time that a bus stands idle is measured, as well as the time a bus is driving. Driving time is then separated in two, one for the time people are transported and one for when they are not. To determine the efficiency of a circulation the time of transporting people gets divided by the total time.

Tool

Upload Schedule

Input Bus Schedule

The screenshot shows the 'Input Bus Schedule' tool interface. It features two file upload sections: 'Upload circulation planning' and 'Upload timetable'. Each section has a 'Drag and drop file here' area with a 'Limit 200MB per file • XLSX' note and a 'Browse files' button. Annotations with arrows point to these buttons: 'Select button to upload bus circulation planning' points to the 'Browse files' button in the first section, and 'Select button to upload bus timetable' points to the 'Browse files' button in the second section. Below these sections is a slider labeled 'Select starting value battery in kWh'. The slider has a range from 255 to 285, with a red dot indicating the selected value of 278. An annotation 'Use slider to select starting battery value' with an arrow points to the slider.

Upload circulation planning

Drag and drop file here
Limit 200MB per file • XLSX

Browse files

Upload timetable

Drag and drop file here
Limit 200MB per file • XLSX

Browse files

Select starting value battery in kWh

255 278 285

Use slider to select starting battery value

Select button to upload bus circulation planning

Select button to upload bus timetable

To upload the bus circulation planning, the planning must be an Excel file with the following format:

- Index: Unique identifier for each row.
- Start location: Starting location for the activity.
- End location: End location for the activity.
- Activity: A description of the activity between starting and ending locations.
- Bus line: The number of the bus line related to the activity.
- Energy consumption: The energy consumption of the activity in kWh.
- Start time: The date and time when starting the activity.
- End time: The date and time when ending the activity.
- Circulation number: The circulation number associated with the activity.

To upload the bus timetable, the timetable must be an Excel file with the following format:

- Start location: Starting location of the bus line.
- Start time: Starting time of the bus line from the starting location.
- End location: End location of the bus line.
- Bus line: The number of the bus line.

When the correct data is uploaded, the 'next' button appears.

Input Bus Schedule

Upload circulation planning

Drag and drop file here
Limit 200MB per file • XLSX

Browse files

omloop planning.xlsx 56.4KB X

Upload timetable

Drag and drop file here
Limit 200MB per file • XLSX

Browse files

Connexion data - 2023-2024.xlsx 25.8KB X

Select starting value battery in kWh

255 278 285

Data upload successful.

Timetable is correct and in the right format, proceed to next page.

Next

Select button to
proceed to the next
page

Overview

After selecting the 'Next' button, the overview screen appears.

Navigation

Select a page

Overview

Overview

Used for clear insights into the current bus schedule. By switching through pages, more detailed information will be available.

If a different bus planning is desired, use 'Import New Excel' option in the menu.

Explore the [user manual](#) for step-by-step guidance on using this tool.

The busplanning passes!

The score of the planning is: **Sufficient**

The current performance indicators are:

	Performance indicator	Value
0	Total idle time	775.00 minutes
1	Total material ride	4124.00 minutes
2	Total time effective driving	7935.00 minutes
3	Average efficiency	0.599

Tips on improving schedule

Visualisation

Gantt chart for busplanning

Shows if current busplanning is feasible

Shows Gantt chart of current busplanning

Shows performance indicators of current busplanning

Activity

- Material Ride
- Bus Line 401
- Bus Line 400
- Charging

Time

Jun 29, 2023

Jun 30, 2023

Navigation

Select a page

Overview

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Activity

- Material Ride
- Bus Line 401
- Bus Line 400
- Charging

Time

Jun 29, 2023

Jun 30, 2023

Select button to go different pages

Select button to go a schedule of a specific bus line

Navigation

Select a page

Overview|

Overview

Bus Specific Schedule

Gantt Chart

Import New Excel

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The busplanning passes!

The score of the planning is: Sufficient

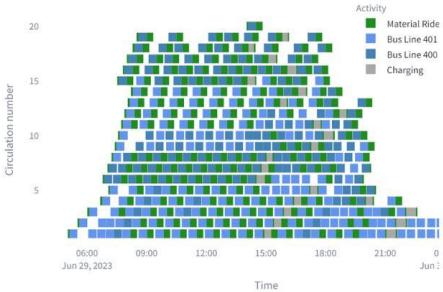
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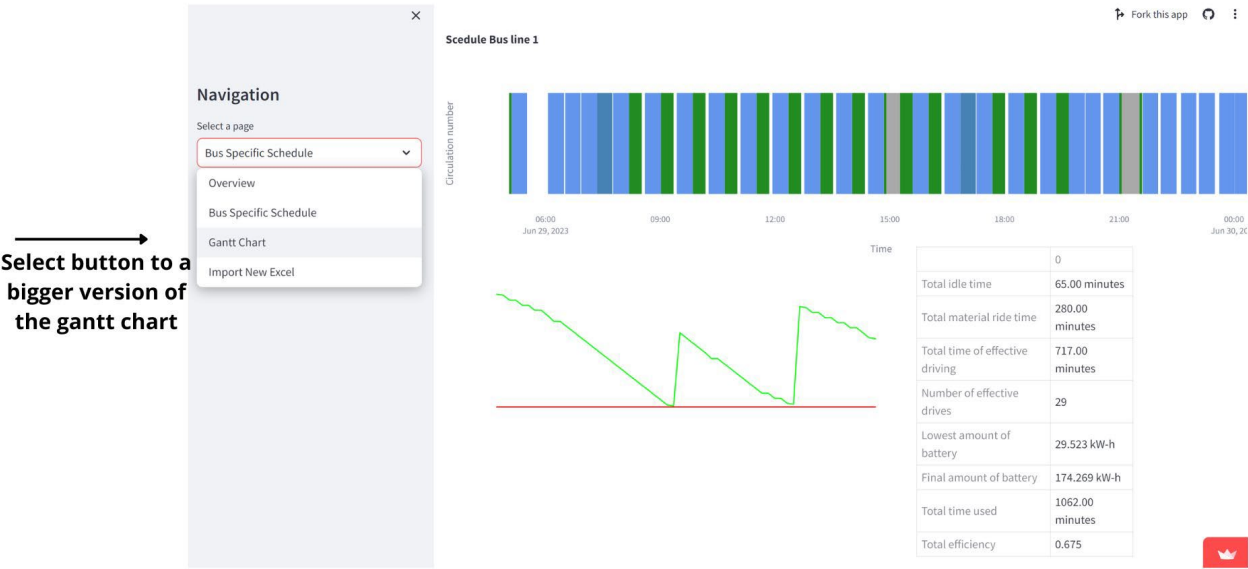
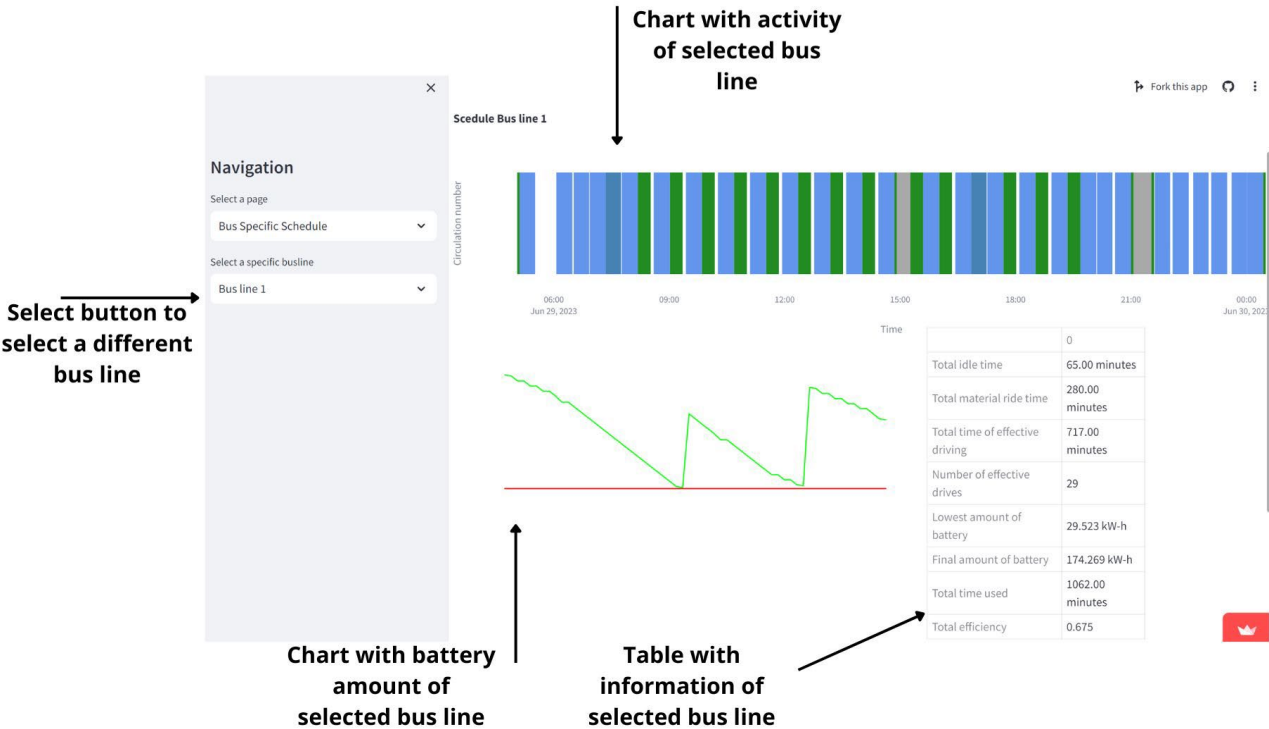
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Bus Specific Schedule



Gantt Chart

