

2020

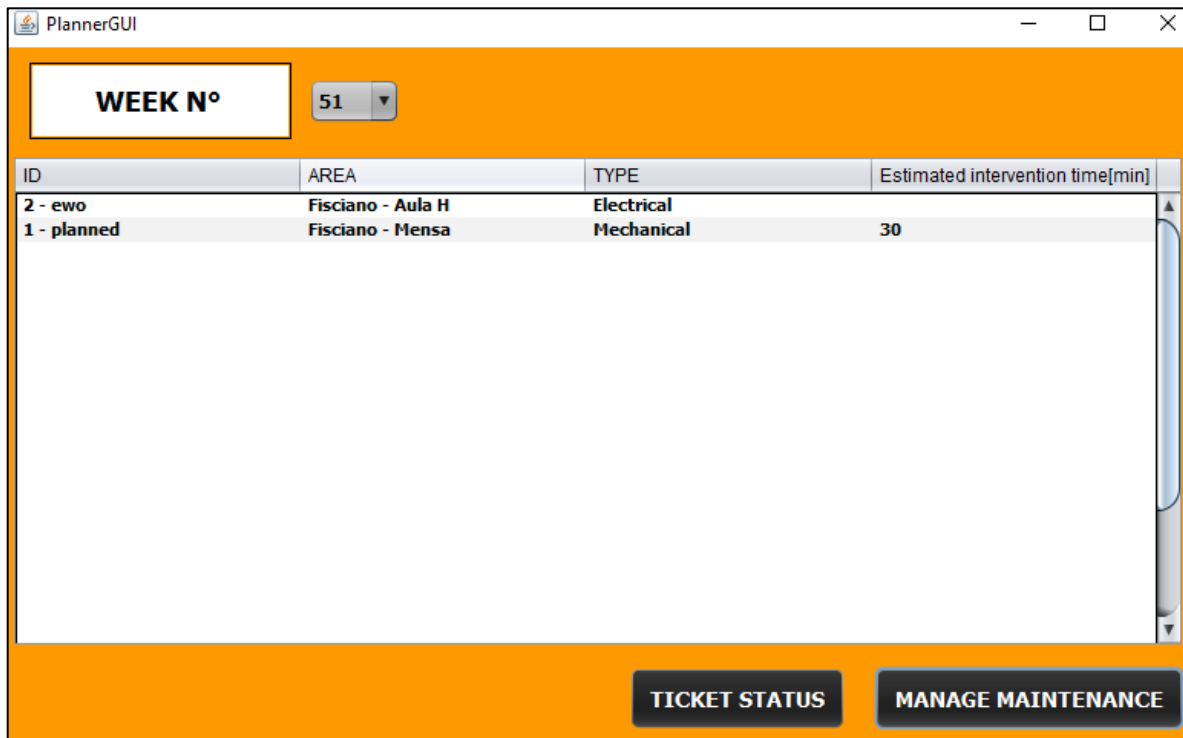
PROJECT DOCUMENTATION

**BIFULCO GIUSEPPE GERARDO- BOLVINO ANGELO RAFFAELE
ESPOSITO SABATINO -GIGLIO IVAN**

GROUP 15

FUNCTIONALITY

In the first interface a user can see the list of the activities that are not been completely assigned yet.

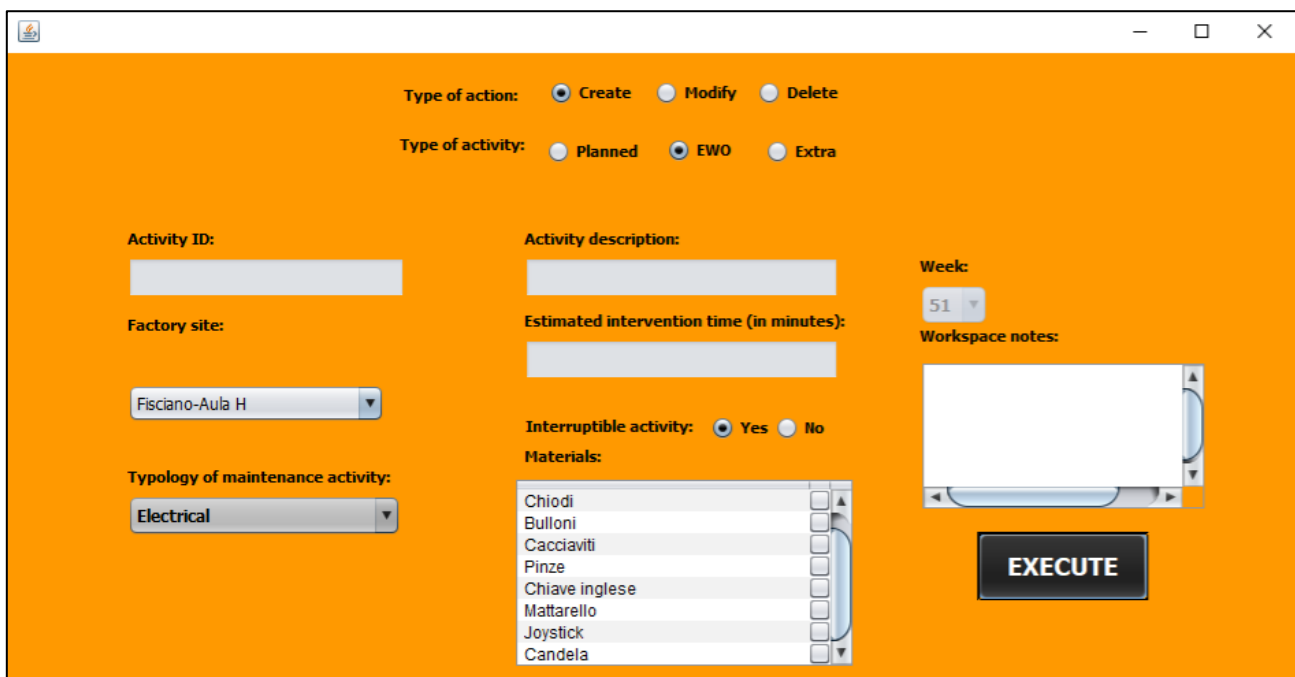


The PlannerGUI window displays a table of activities. At the top, there is a 'WEEK N°' dropdown menu set to '51'. The table has four columns: ID, AREA, TYPE, and Estimated intervention time[min].

ID	AREA	TYPE	Estimated intervention time[min]
2 - ewo	Fisciano - Aula H	Electrical	
1 - planned	Fisciano - Mensa	Mechanical	30

At the bottom of the window, there are two buttons: 'TICKET STATUS' and 'MANAGE MAINTENANCE'.

If the button **MANAGE MAINTENANCE** is clicked, the following interface will be displayed:



The 'MANAGE MAINTENANCE' form is displayed. It includes the following fields and controls:

- Type of action:** Radio buttons for Create (selected), Modify, and Delete.
- Type of activity:** Radio buttons for Planned, EWO (selected), and Extra.
- Activity ID:** Text input field.
- Factory site:** Dropdown menu with 'Fisciano-Aula H' selected.
- Activity description:** Text input field.
- Estimated intervention time (in minutes):** Text input field.
- Week:** Dropdown menu with '51' selected.
- Workspace notes:** Text area.
- Typology of maintenance activity:** Dropdown menu with 'Electrical' selected.
- Interruptible activity:** Radio buttons for Yes (selected) and No.
- Materials:** List box with the following items: Chiodi, Bulloni, Cacciaviti, Pinze, Chiave inglese, Mattarello, Joystick, and Candela. Each item has a checkbox to its right.
- EXECUTE** button.

Through the principle buttons, it is possible to create and delete any type of activity and modify only the workspace notes of the planned activities. Depending on the choice of the type of activity, it will be possible to fill certain fields:

- Planned activity: factory site, typology of maintenance activity, description, estimated time, interruptibility and week (materials and workspace notes are optional);
- EWO: factory site, typology of maintenance activity, interruptibility (materials and workspace notes are optional);

For the EWO activities, the selected week will be the current one;

For all the activities, the ID will be set in ascending order;

The button **EXECUTE** creates the activity.

After clicking an activity in the main interface, there are two cases:

1. If the activity is a planned one, clicking on it the following window will appear: in this interface is possible to verify all the activity's attributes, the needed skills and the linked procedure; here the user can only modify the workspace notes. Clicking on the "PDF" button an user can see the SMP file.

The screenshot shows a software window with an orange background. At the top, there are three main sections: 'Week n°' with the value '51', 'Activity to assign' with the value 'Planned 1-Mensa-Mechanic...', and a 'Planned 1-Mensa-Mechanic...' button. Below these, there are three main content areas: 'Workspace Notes' with a text area containing 'Notes', 'Intervention Description' with a text area containing 'Planned Activity 1', and 'Skills needed' with a list: 'PAV certification', 'electrical maintenance', 'knowledge of cable type', and 'xyz-type robot knowledge'. At the bottom, there is a 'PDF' button, a tooltip for 'Standard Maintenance Procedure File (SMP)', and a 'FORWARD' button.

Clicking on the **FORWARD** button, the updates on the workspace notes are sent and the following interface will be displayed:

Week n° 51 **Activity to assign** Planned 1-Mensa-Mechanical-30

Skills needed		Workspace notes	Maintainer Availability								
PAV certification		Notes	Maintainer	Skills	Lun	Mar	Mer	Gio	Ven	Sab	Dom
electrical maintenance			Minnie	0/4	100	100	100	100	100	100	100
knowledge of cable type			Paperino	2/4	100	100	100	100	100	100	100
xyz-type robot knowledge			Topolino	2/4	100	100	100	100	100	100	100
			Pluto	2/4	100	100	89	100	100	100	100

Interruptibile : Yes

In this interface, in addition to the previous fields, the list of all maintainers availabilities during the week in which the activity was assigned will be displayed, also allowing the comparison between necessary skills and skills that belong to the maintainers;

If a cell with a maintainer availability is selected, the interface will show the selected maintainer availability for the selected day:

Week n° 51 **Activity to assign** Planned 1-Mensa-Mechanical-30

Skills needed		Workspace notes	Maintainer Availability: Wednesday								
PAV certification		Notes	Maintainer	Skills	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	14:00-15:00	15:00-16:00	16:00-17:00
electrical maintenance			Pluto	2/4	15	60	60	60	60	60	60

Interruptibile : Yes

BACK

Here is possible to select the time slot in which the activity will be assigned, partially or totally. The activity is assigned slot by slot, so it's necessary to select one cell at a time, and it's possible to assign the remaining time of the activity to a different maintainer clicking the **BACK** button.

2. Clicking on an EWO activity will display the following window; here the user can select the skills needed and modify the intervention description and estimated time. If the activity was partially or totally assigned, these fields can't be modified.

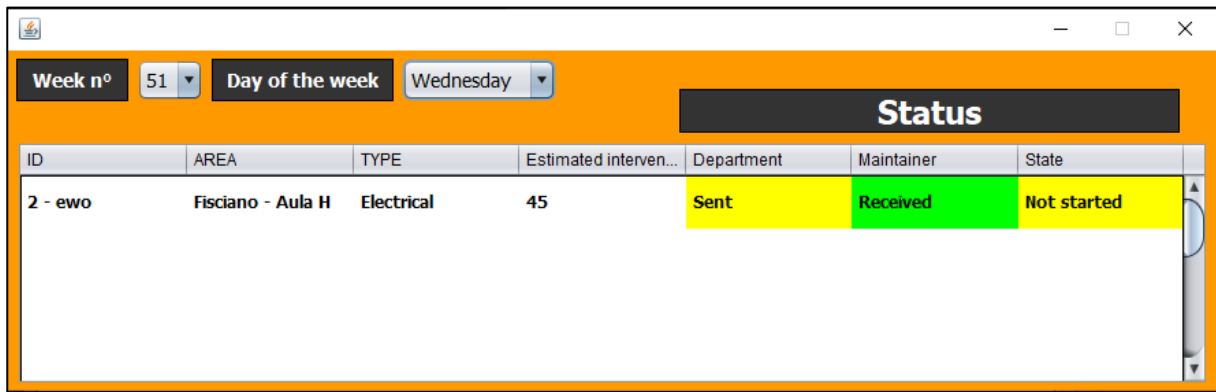
The screenshot shows a window titled 'Activity to assign' for 'EWO 2-Aula H-Electrical'. It includes a 'Week n°' field with the value '51'. The main area is divided into three sections: 'Workspace Notes' (containing the text 'Urgent'), 'Intervention Description' (containing 'Description inserted now' and an 'Estimated Time' field with the value '45'), and 'Skills needed' (a list of skills with checkboxes). The 'Skills needed' list includes 'PAV certification', 'electrical maintenance', 'knowledge of cable type', 'xyz-type robot knowledge', 'knowledge of robot workstation 23', 'knowledge of AI', 'knowledge of SCRUM', and 'knowledge of Java'. The 'knowledge of AI' checkbox is checked. A 'FORWARD' button is located at the bottom right.

Clicking on the **FORWARD** button, the updates will be sent and the following interface will be displayed:

The screenshot shows a window titled 'Maintainer Availability' for 'EWO 3-Aula H-Electrical'. It includes a 'Week n°' field with the value '51'. The main area is divided into three sections: 'Skills needed' (a list of skills with checkboxes), 'Workspace notes' (empty), and 'Maintainer Availability' (a table showing the availability of maintainers for different time slots). The 'Skills needed' list includes 'PAV certification', 'electrical maintenance', 'knowledge of cable type', and 'xyz-type robot knowledge'. The 'Maintainer Availability' table has columns for time slots: 8:00-9:00, 9:00-10:00, 10:00-11:00, 11:00-12:00, 14:00-15:00, 15:00-16:00, and 16:00-17:00. The rows represent maintainers: Pippo (4/4), Pluto (2/4), Paperino (2/4), and Minnie (0/4). The table shows the number of minutes available for each maintainer in each time slot. For example, Pippo has 60 minutes available in all slots. Pluto has 15 minutes available in the 8:00-9:00 slot and 60 minutes in all other slots. Paperino and Minnie have 60 minutes available in all slots. Below the table, there are fields for 'Interruptibile' (set to 'Yes'), 'Assigned minutes' (0), 'Left minutes' (50), and 'Total minutes' (50).

Because an EWO activity can be assigned only in the current day, in this interface will be displayed the maintainers availabilities for the current day; clicking on a time slot will partially or totally assign the activity, and the minute labels will be update; The displayed availability in each time slot does not take into account the time allotted to interruptible activities: this is because the EWO activities can be assigned instead of interruptible activities; if this happens, the time taken from the interruptible activity is shown on the main interface.

If the **TICKET STATUS** button is clicked, the following window will be displayed:



The screenshot shows a window titled 'TICKET STATUS' with a filter bar at the top. The filter bar includes 'Week n°' set to '51' and 'Day of the week' set to 'Wednesday'. Below the filter bar is a table with the following data:

ID	AREA	TYPE	Estimated interven...	Department	Maintainer	State
2 - ewo	Fisciano - Aula H	Electrical	45	Sent	Received	Not started

Here will be shown the EWO activities that have been partially or totally assigned based on the day and week selected above; the status of the activities is also shown, but it has not yet been managed due to lack of specifications.