

CRONUS

SCHEDULER SOFTWARE

SOFTWARE USER GUIDE

VER 1.0

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Software Description

CRONUS is a web application that allows the scheduling of different types of events, such as: preventive maintenance, emergent repairs for machines, and the usual orders with workflows that include the cutting, hinged and other services that Hermaprove provides, and shows these events in easy to understand views that facilitate the scheduling process and if needed allows the transferring of pending tasks (orders not started) to another branch office.

Software Specification

Deployment Specifications

CRONUS runs on a cloud architecture through Amazon Web Services, and is available to end users over the Internet. The following table describes the services used to run the web application.

NAME	DESCRIPTION
AWS Lambda	Cloud computing service.
Amazon S3	File storage service.
Amazon API Gateway	API Gateway service.
Amazon SES	Email service
Amazon RDS	Database service.

Development Dependencies

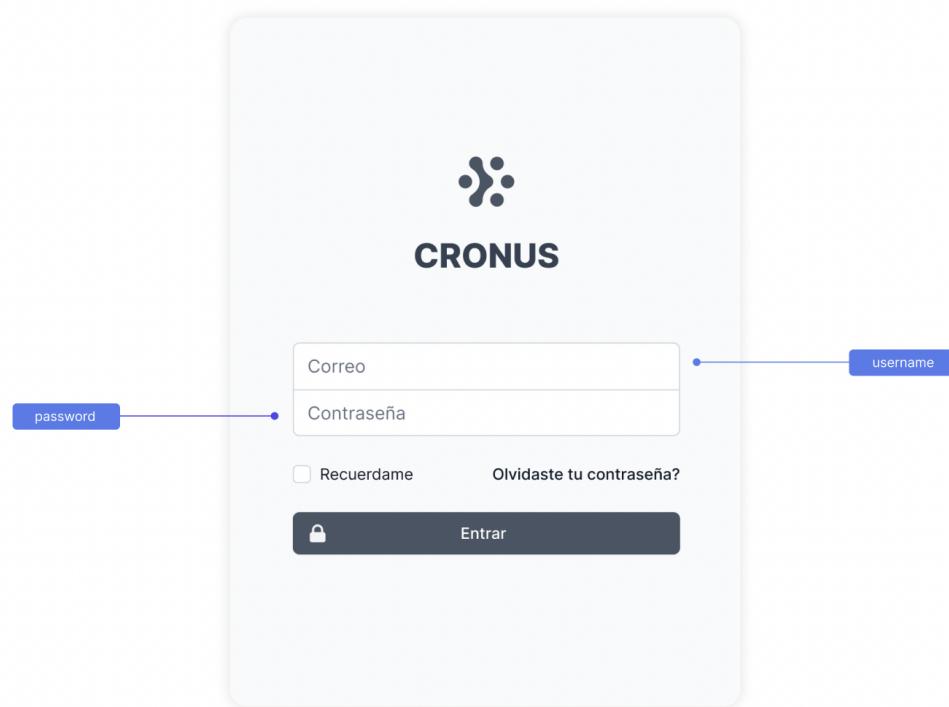
CRONUS is developed in two environments, on the backend side, Django is used as the development framework, and on the frontend side it uses ReactJS to create UI components. The following table describes the versions of the frameworks used in the development of the web application.

NAME	VERSION
Django	4.0.5
ReactJS	18.0.0

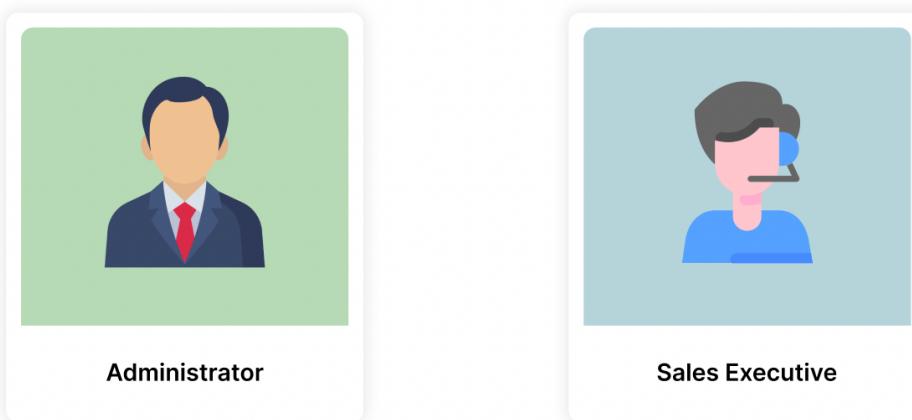
Getting Started

Authentication

To access the functionalities of the application it is necessary to log in with the user that has been granted to you, if you do not have one, request it from your administrator.



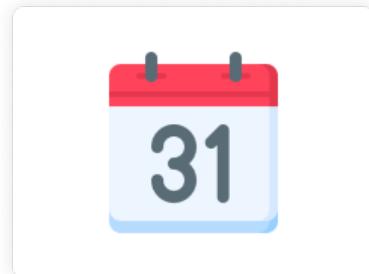
Within the application you will have access only to the functionalities that are allowed by your assigned **role**.



Modules

CRONUS has three main modules for the development of operational and administrative activities in Hermaprove's branches.

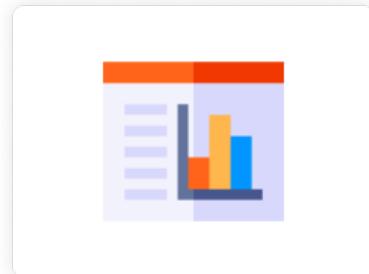
The **scheduling module** to manage customer orders.



The **administration module** to manage the resources of the application



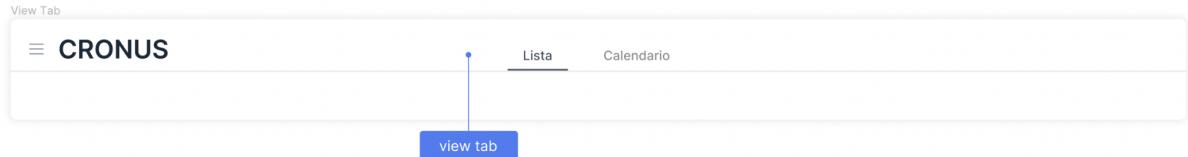
The **reporting module** for displaying summary information on branch operations.



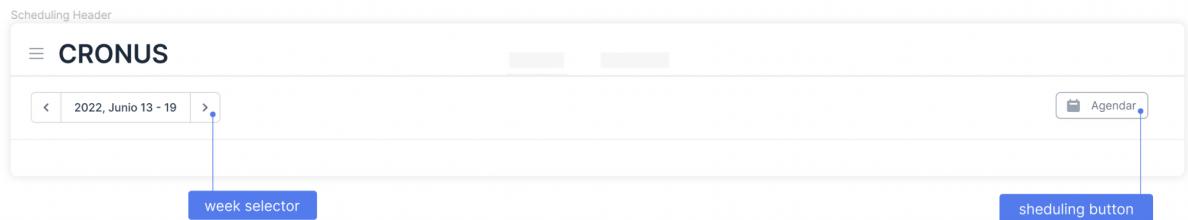
Scheduling Module

The scheduling module provides functionalities to the user for the registration of customer orders, and the reservation of machines for preventive maintenance and repairs.

Within the calendar module it is possible to choose between two views, the list of orders and the calendar of events.



In the header section we find a week selector to change the week for which we are viewing the orders, and a button to schedule a new task.



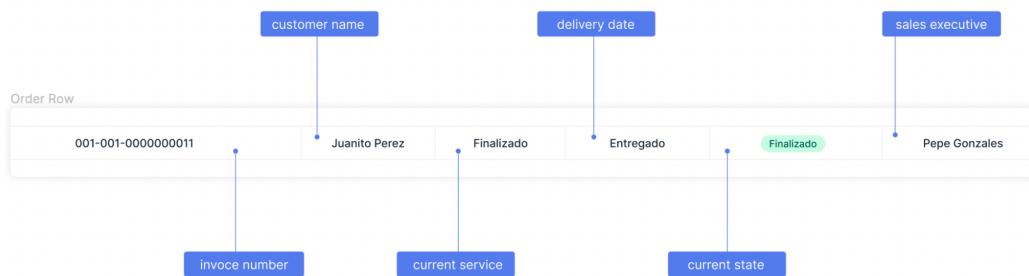
To schedule an order, just click on the scheduling button and write the order information on the form.

This diagram shows the 'New Order' form titled 'Agendar'. The form includes fields for 'Actividad' (Activity), 'Descripción' (Description), 'Número de piezas' (Number of pieces), 'Fecha de angedamiento' (Creation date), 'Horario' (Hours selector), 'Fecha de entrega' (Delivery date), 'Flujo de Trabajo' (Workflow selector), 'step order' (Step order), 'step name' (Step name), and a 'plan file uploader' (Plan file uploader). Buttons include 'save', 'cancel', and 'activity to schedule'.

Orders List

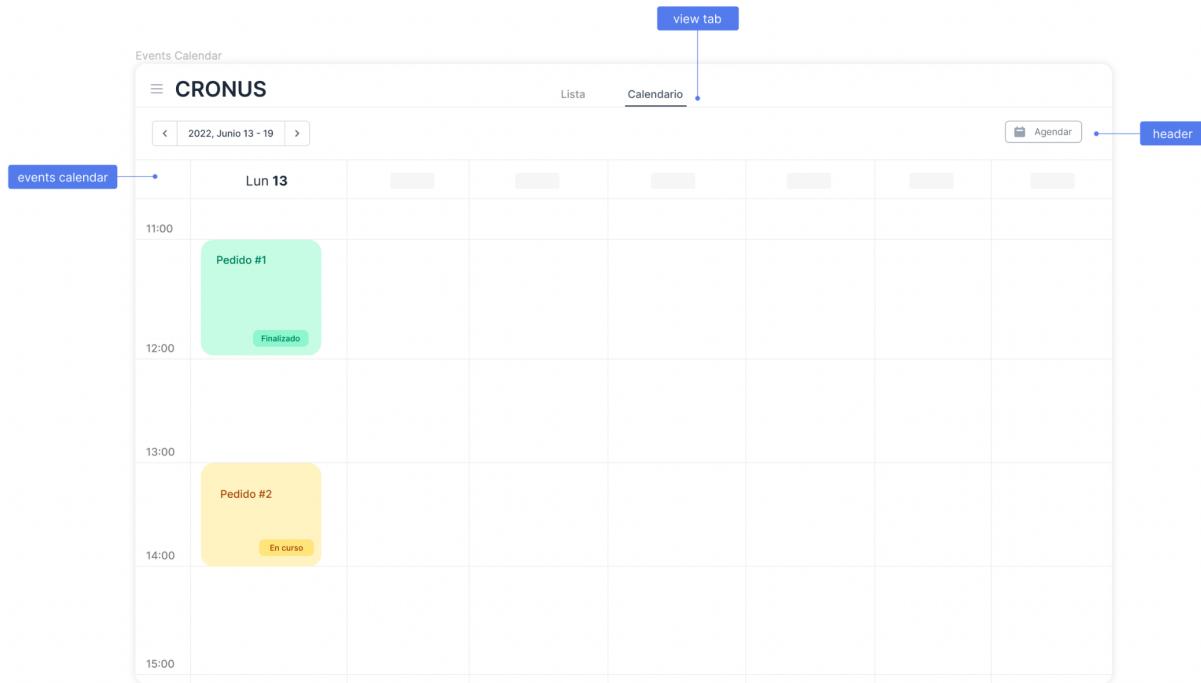
The screenshot shows a web-based application titled "CRONUS" under the "Orders List" tab. At the top, there are two tabs: "Lista" (selected) and "Calendario". Below the tabs, a date range "2022, Junio 13 - 19" is displayed. On the right side of the header, there is a button labeled "Agendar". The main area contains a table with the following columns: Cliente, Etapa actual, Fecha de Entrega, Estado actual, and Agendado por. The table has several rows, with the first row highlighted in green and labeled "Finalizado". The second row is also labeled "Finalizado". The third row is partially visible. The entire table is labeled "orders table".

In the order list view we can find the customer orders divided by dates of the selected week. If we click on one of the dates, the orders created that day will be displayed.



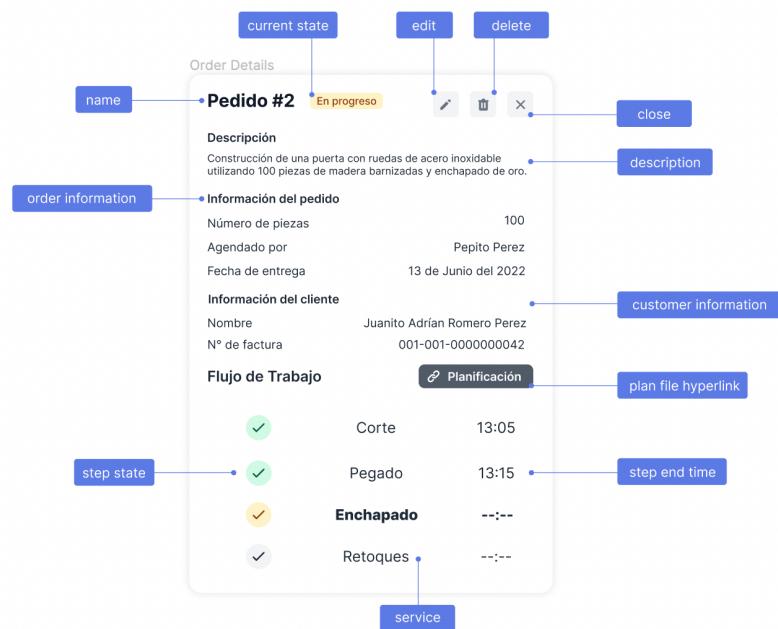
In each of the rows, we displayed the summary information of the order, the invoice number of the order, the name of the client, the service that is being carried out in the order at that moment, the delivery date, the current status of the order, and the agent who carried out the scheduling.

Events Calendar



In the calendar view we can find the events scheduled in the selected week, event cards are displayed with the name of the event, and the current status of the event coded with colors and located in the schedule that was scheduled.

Clicking on an event card pulls down the task details showing more detailed information about the event and the tasks to be performed to complete it.

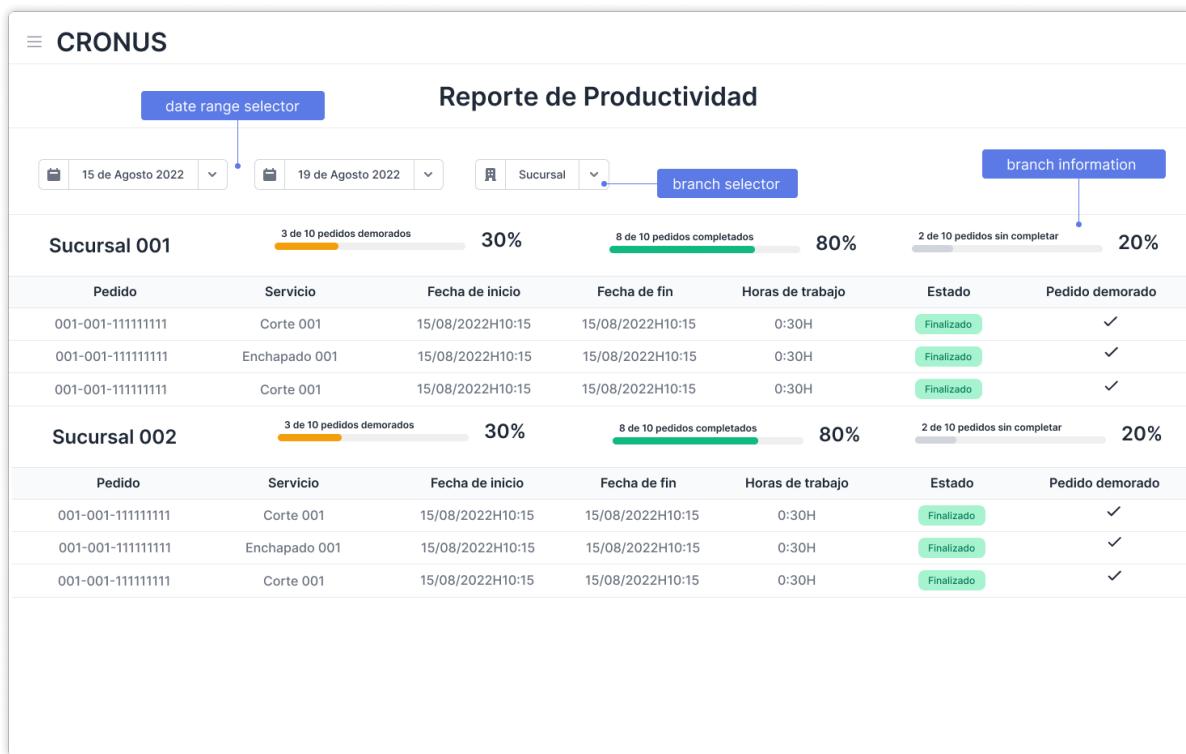


Color Codes

Within CRONUS we use colors to make the status of events more visible. The following table lists the colors used and their meaning.

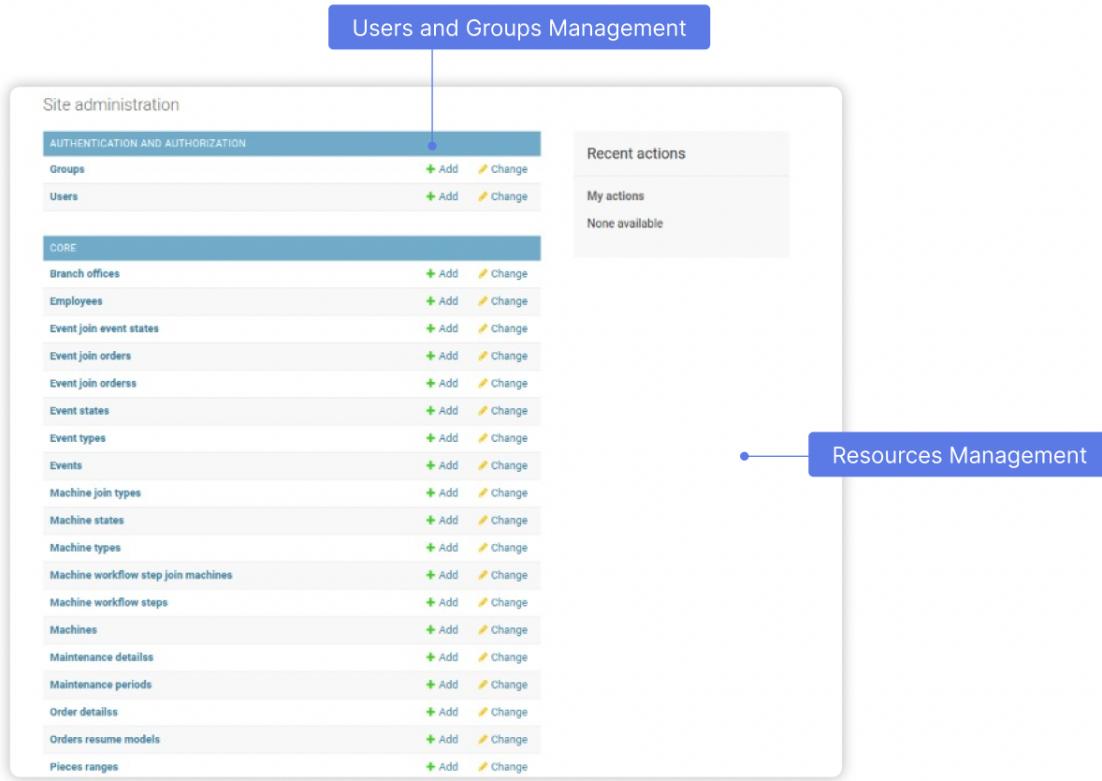
FG.COLOR	BG.COLOR	MEANING
		Green implies a state where the event or step is finished.
		Amber is used to describe a state where the event or step is currently working.
		Gray is used when the event or step has not started yet or the order was delivered.
		Rose is used to describe a warning state, this occurs when an event is delayed about their delivery date.

Reports Module



In the reports section we can view a summary of branch productivity. We can use the date range selector to input the start date and end date of orders that we want to filter and select the multiple branches that we want to display in the report.

Management Module



We provide an interface to manage resources of the system, this allows a flexibility in the configuration and behavior of the application. We can add, remove, or update whichever resource as long as we perform this as a Manager.

Employees Management

Home - Core - Employees

AUTHENTICATION AND AUTHORIZATION

- Groups + Add
- Users + Add

CORE

- Branch offices + Add
- Employees** + Add
- Event join event states + Add
- Event join orders + Add
- Event join orderss + Add
- Event states + Add
- Event types + Add
- Events + Add
- Machine join types + Add
- Machine states + Add
- Machine types + Add
- Machine workflow step join machines + Add
- Machine workflow steps + Add
- Machines + Add
- Maintenance detailss + Add
- Maintenance periods + Add
- Order detailss + Add
- Orders resume models + Add
- Pieces ranges + Add

Select employee to change

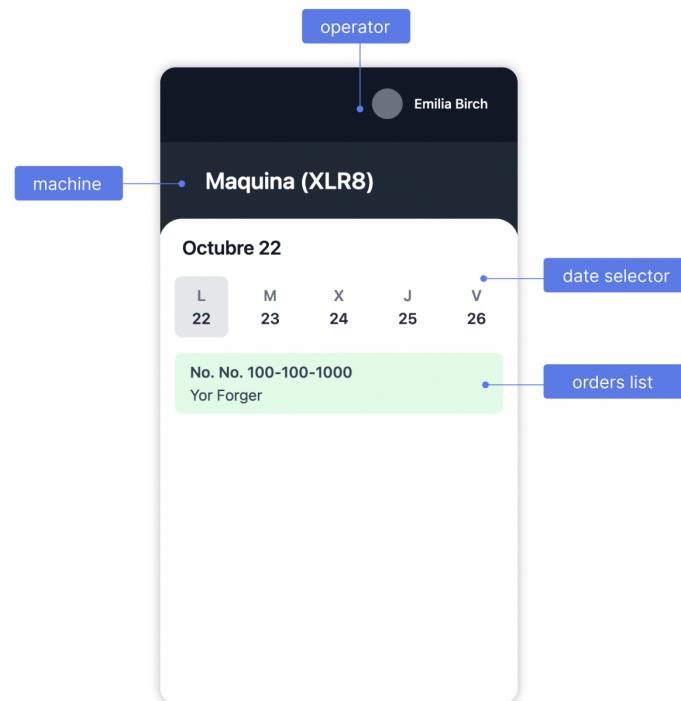
Action:	ID	NAME	SURNAME	BRANCH ID
<input type="checkbox"/>	1036976523	Allison	Agila	2
<input type="checkbox"/>	0986552147	Nicole	Agila	1
<input type="checkbox"/>	0967415989	Melanie	Agila	1
<input type="checkbox"/>	0863952863	Nicole	Agila	2
<input type="checkbox"/>	0793528964	Emily	Agila	1
<input type="checkbox"/>	0736912578	Sandra	Agila	1
<input type="checkbox"/>	0653965523	Emily	Agila	2
<input type="checkbox"/>	0423859741	Melanie	Agila	2
<input type="checkbox"/>	023987415	Emilia	Agila	1
<input type="checkbox"/>	0123968574	Sandra	Agila	2

10 employees

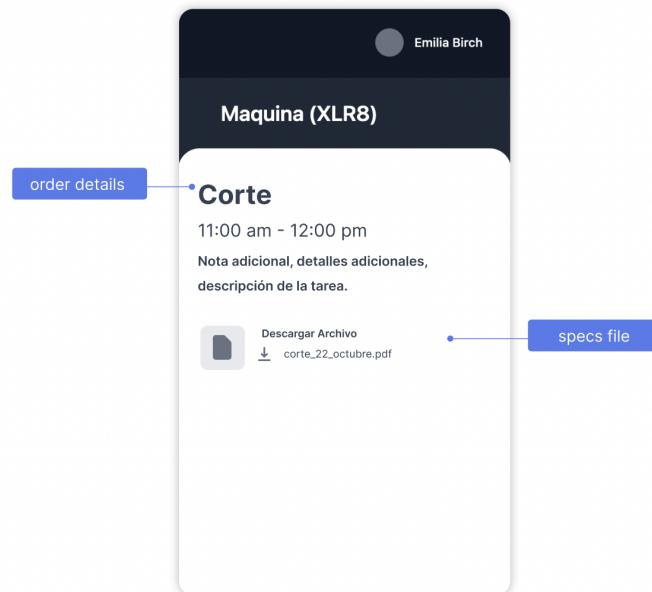
ADD EMPLOYEE +

Also we provide a interface to manage the employees that work in any Hermaprove branch

Mobile App



To provide an interface that allows the interaction with the system from the operators, the mobile application allows an operator to view their daily activities.



Also allows you to view the order details and the specification files.