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Bella & Bona Kitchen

➢ ***Document Details*:-**

- ***Name*:-** *Order Management System (OMS) Front-end Web Application (ReactJS) Architecture.*
- ***Date Modified*:-** *24rd May, 2022.*

➢ ***Read Me (Preface)*:-**

- ***Introduction*:-**
  - *This document intends to explain Bella & Bona's web-app architecture with the source code (written in ReactJS) being the main point of interest along with its interaction with the various back-end APIs. We start with the system level architecture and use-case architecture, tools and technologies used to create, build and test methodologies and culminating with the procedure of running the application (front-end) on a local machine (Mac or Windows) and instructions to add new features with an example.*
- ***Intended Audience*:-**
  - *Any Bella & Bona front-end/full-stack developer who's looking to get setup with the development environment and understand how the application works with a goal of further development of the app or making changes to the existing.*
- ***Prerequisites*:-**
  - *Knowledge of basic ReactJS (Virtual DOM, application life-cycle, Hooks) , HTML, CSS and JavaScript (ES5 to ES7) , basic Git (branching, pull-requests), basic npm commands.*

- *Knowledge and experience in use of VSCode (prefered IDE to maintain uniformity among team-mates).*

- ***Environments*:-**

  - *Development (for use by developers on local machines with debug binaries included).*

  - *Staging (for a production-like environment for internal checks – compressed (minified) with low size being priority)*

  - *Production (live site for customer use - compressed (minified) with low size being priority).*

- ***Reference Documents and Links*:-**

  - *Front-end Github Repository:*
    https://github.com/Bella-Bona/bnb-kitchenui-react

  - *Staging Web Application Link:*
    https://sandbox.bellabona.com/

  - *Backend Github Repository:*
    https://github.com/Bella-Bona/bandb-db-sinc

- ***Getting started with app-development on a local system (Windows)***

  - ***Requirements:***
    - *Download & Install NodeJs (Mac/Windows)*
      - *https://nodejs.org/en/download/*

    - *Download & Install VSCode (Mac/Windows)*
      - *https://code.visualstudio.com/download*

    - *Download & Install Git (Mac/Windows)*
      - *https://git-scm.com/downloads*

- *Contact admin (Tushar - tushar@bellabona.com OR Rajendra Mehra rajendra@bellabona.com) to add to the developers team for the organisation "Bella&Bona GmbH".*

- *Create a new folder in a location of your choice which will house the OMS front-end code. This will be the folder that holds the repository. For this document's purpose let's call this folder omsfrontend and assume it's stored on a Windows PC under D:\ drive, making the file path D:\omsfrontend \. Henceforth this folder will be referred to as omsfrontend folder*

- ***Procedure:***
  - ***Cloning:***
    - *In a Terminal or Command prompt or Visual Studio Terminal, navigate to the folder created and paste "git clone https://github.com/Bella-Bona/bnb-kitchenui-react.git" . Note that the link after git clone is what was copied from github.com . Store this in a notepad for future reference (will be required if cloning into multiple folders for code-review and testing purposes).*

  - ***Dependencies Installation:***
    - *Open the folder cloned in VSCode - Navigate to D:\omsfrontend\bnb-kitchenui-react-master\ right-click in Explorer (Windows) or Files (Mac) and select "Open with Code"*

    - *In the VSCode toolbar, select View>>Terminal to open up the terminal. Within this terminal, type in yarn install (OR) npm install to install all the dependencies of this project.*

    - *In case of dependencies conflict use npm install –legacy-peer-deps*

    - *Wait for the install to complete. Once done, type in yarn start (OR) npm start in the same Terminal to run the application.*

- *Open a browser (Chrome, Firefox or Edge) and type in localhost:3000 in the address bar to view and interact with the app. Press F12 to view the developer console.*

- ***Environment Variables:***
  - *Create a .env.local file and paste the contents of .env.sandbox to it.*

- ***Building for Staging:***
  - *Open package.json file in VSCode and hover mouse over "build:sandbox" key to bring up a tiny popup "Run Script". Click it to build the staging build. Build binaries are stored in the folder <project_root>/build/ folder.*

- ***Building for Production:***
  - *Open package.json file in VSCode and hover mouse over "build:production" key to bring up a tiny popup "Run Script". Click it to build the staging build. Build binaries are stored in the folder <project_root>/build/ folder.*

- ***Testing on Local Machine:***
  - *In the VSCode terminal, with the project open, type in yarn test (OR) npm test to run and view ALL test results.*

- ***Updating snapshots:***
  - *In case a component has changed and a snapshot needs to be updated, run yarn test a -u to update the snapshot. If not sure, contact a fellow-developer for assistance.*

➢ ***Dependencies Used:-***

- *FRAMEWORK ⇒ Material UI*
- *STATE MANAGEMENT ⇒ Redux*
- *REDUX MIDDLEWARE ⇒ Redux Thunk*
- *CRASH REPORTING ⇒ PropTypes*
- *ROUTING ⇒ react-router-dom*
- *TESTING LIBRARY ⇒ Jest*

- *AJAX API CALLS ⇒ Axios*
- *TOKEN GENERATION ⇒ Json Web Token (JWT)*

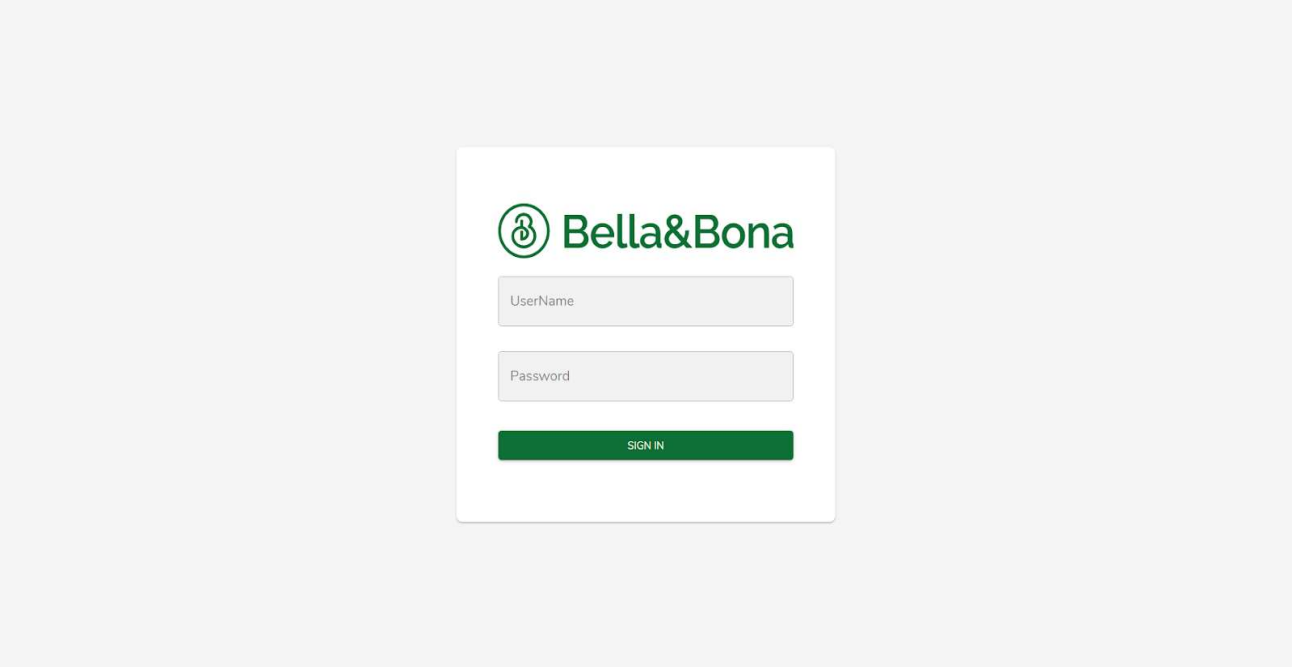
➢ ***Use-case Architecture:-***

- *At the time of writing this document, there is only one type of user for the app. Since the app is meant only for the authorised staff members, thus no provision for sign up is being provided.*

- ***Unauthenticated Pages:-***

  - ***Sign In Page:-*** ***(URL: <base_url>/auth)***

    - *This is the page the user uses to sign in to the application using a username and a password.*



    - *There is no provision for creating a new account, forgot password or anything else.*

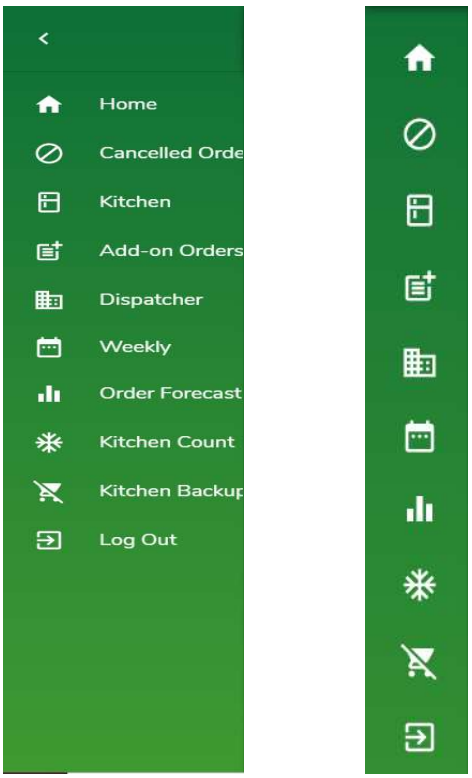
- ***Page Breakup:-***

- ***Navbar:-***

  - *It basically has a hamburger menu that toggles opening and closing of the side menu bar.*
  - *Secondly, It contains the company name "Bella&Bona" along with its icon.*
  - *Thirdly, the name of the application.*

- ***Side Menubar:-***

Open mode ***Close mode***



  - *It basically contains links to all the authenticated pages of the application along with a "Logout" button.*

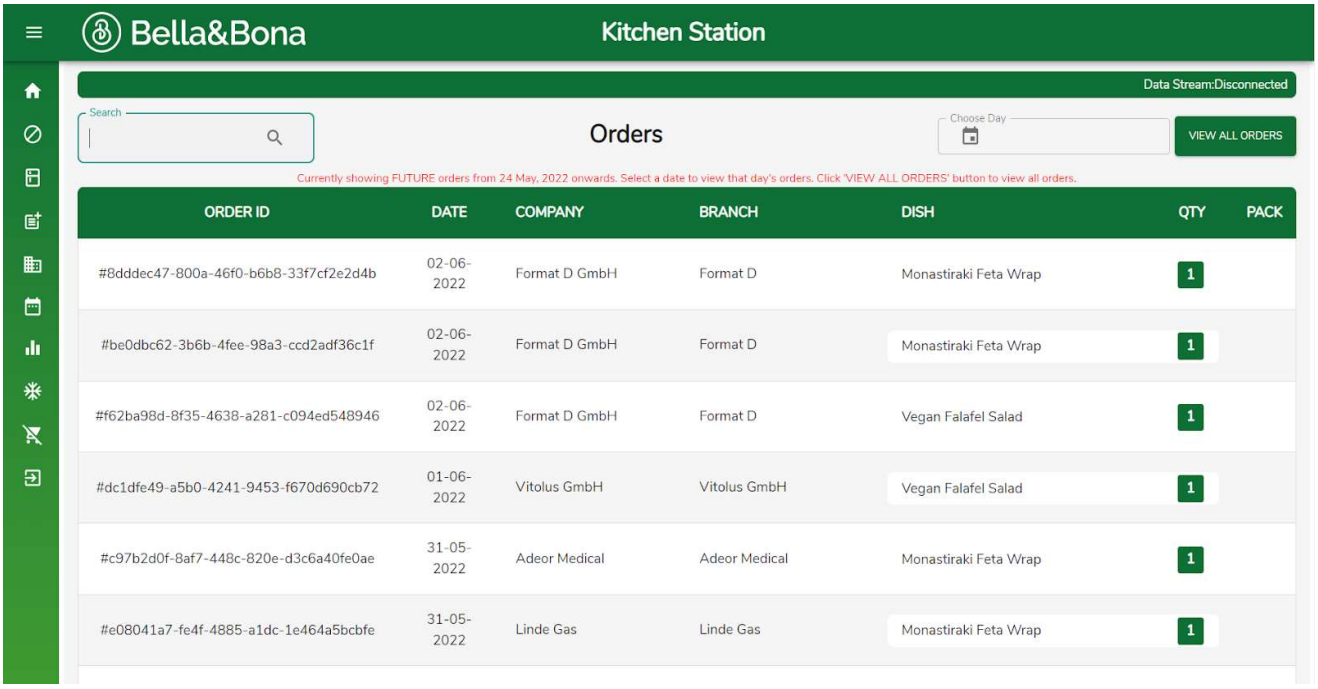
- ***Main Component:-***

- *This is the main part of the application where all the components are rendered.*
- *The various components are as follows:-*
    - *Orders* ⇒ *'/orders'*
    - *Cancelled Orders* ⇒ *`/cancelledOrders`*
    - *Kitchen* ⇒ *`/kitchen`*
    - *Add-On Orders* ⇒ *`/addOns`*
    - *Dispatcher* ⇒ *`/dispatcher`*
    - *Weekly* ⇒ *`/weekly`*
    - *Order Forecast* ⇒ *`/orderForecast`*
    - *Kitchen Count* ⇒ *`/kitchenCount`*
    - *Kitchen Backup* ⇒ *`/kitchenBackup`*
    - *Logout* ⇒ *`/auth`*

- ***Authenticated Pages:-***

    - ***Orders Page:-*** ***(URL: <base_url>/orders)***

        - *This is also the home page of the web application just after the authentication page.*



- *In this page all the orders that have been made by various companies and branches through the ecommerce application are listed in order.*

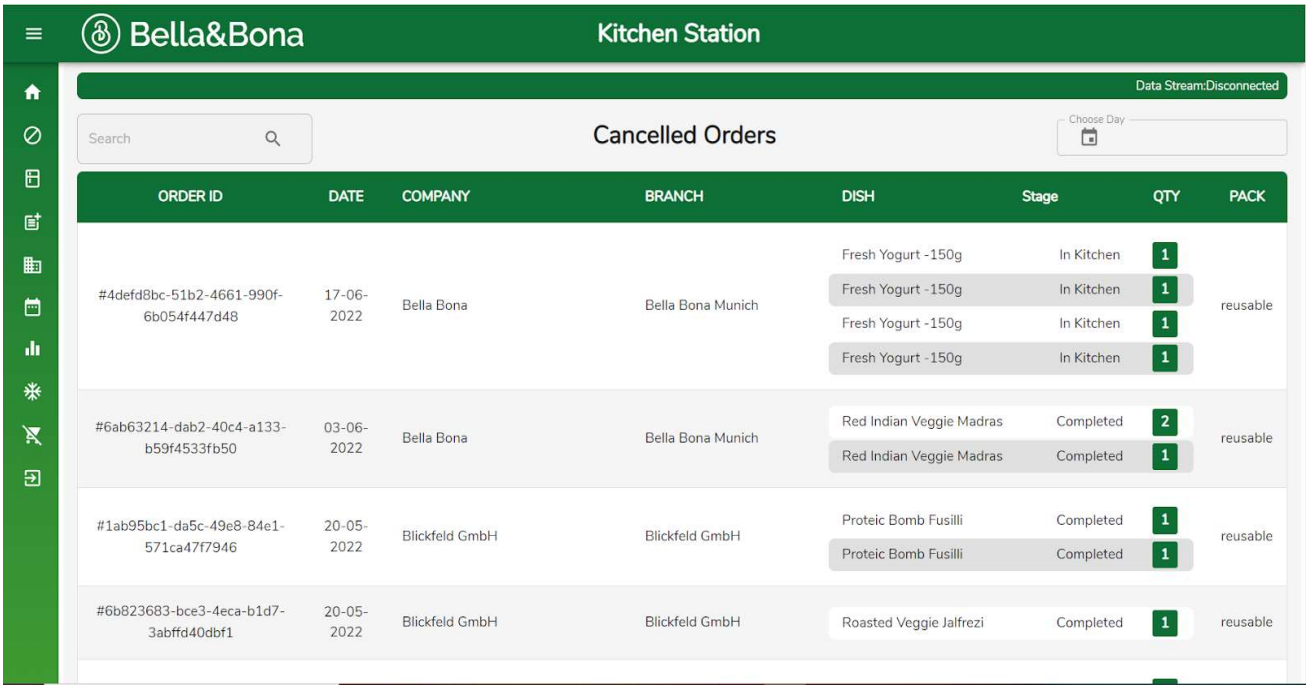
- *At the top-left corner of the there is a search button, it can be used to search orders wrt to the dishes it has.*

- *Each order consists of:*
  - *Order Id*
  - *Date of delivery***
  - *Company Name*
  - *Branch Name*
  - *Dish Name*
  - *Quantity of dish ordered.*
  - *Pack type (reusable packaging (OR) normal packaging)***

- *At the top right corner there is a provision to filter orders wrt the date of delivery. Next to it there is a button which toggles between "View All Orders" & "View Future Orders" applying filters as per their name.*

- ***Cancelled Orders:- (URL: <base_url>/cancelledOrders)***

  - *This page consists of all the cancelled orders during various stages/lanes in the kitchen.*

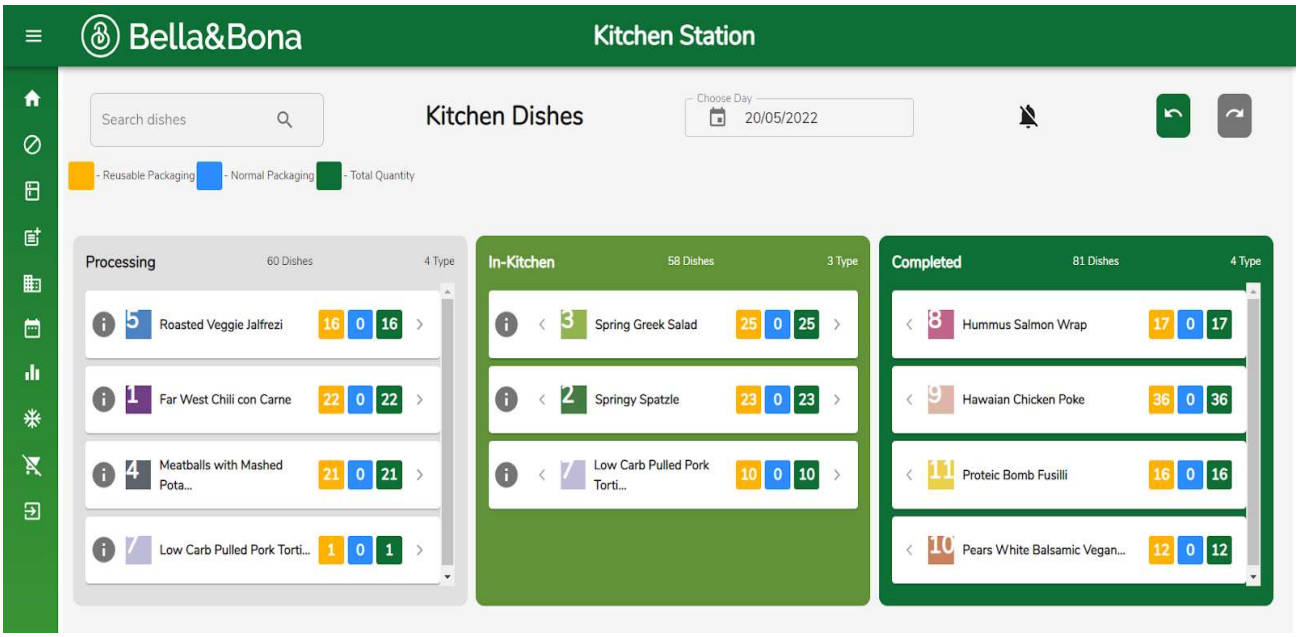


- *The "Search" bar (top-left) & "Choose Day" bar (top-right) has the same functionality as it is in the orders page.*

- *Each cancelled order consists of:*
  - *Order Id*
  - *Date***
  - *Company Name*
  - *Branch Name (of the company)*
  - *Dish name (array of dishes)*
  - *Stage (kitchen lane/stage at which the orders was cancelled)*
  - *Quantity (of the dish cancelled)*
  - *Pack type (reusable packaging (OR) normal packaging)*

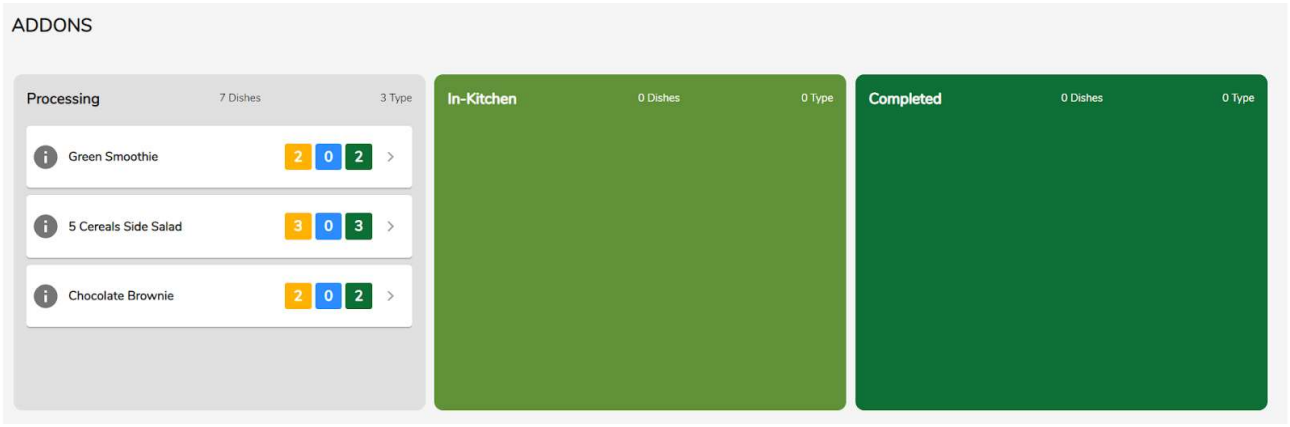
- ***Kitchen:***

  - *This page houses all the processes after ordering and before packaging & dispatching.*



- *Kitchen has nothing to do with the orders (company name etc.,)*

- *Each order in the kitchen comes with:*
  - *Main Dish*
  - *Add Ons (If any)*
  - *Type of packaging ('Reusable Packaging' (OR) 'Normal Packaging')*



- *Each section consists of three lanes/stages representing the current position of the dish ordered. They are:*
  - *Processing*
  - *In Kitchen*
  - *Completed*

- *Provision has been made in the ecommerce app to cancel an order at any lane.*

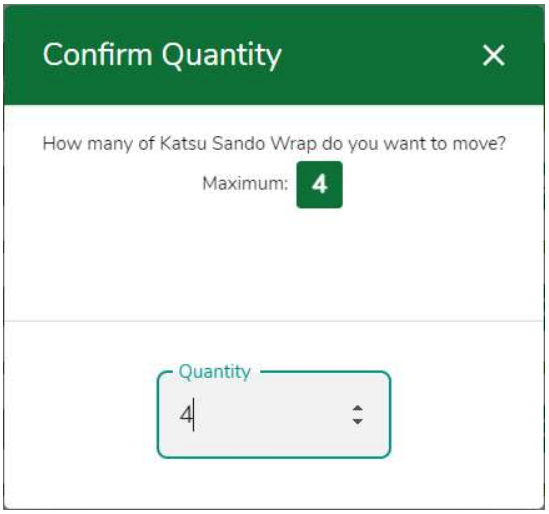
- *Each lane has two counts:*
    - *Number of Dishes*
    - *Types of Dishes*

- *Each lane/stage consists of a list of items (basically different dishes).*

- *Each element of the list has:*
    - *Dish Id - [SKU] - as a primary index*
    - *Dish Name*
    - *Recipe*
    - *Count of Reusable Packaging*
    - *Count of Normal Packaging*
    - *Number of Dishes.*

- *Provision has been made to transfer each dish from one lane to another in either direction by clicking the arrow point in the respective direction.*

- *While transferring each dish having quantity greater than 1, we modal pops up asking for the quantity that has to be transferred.*



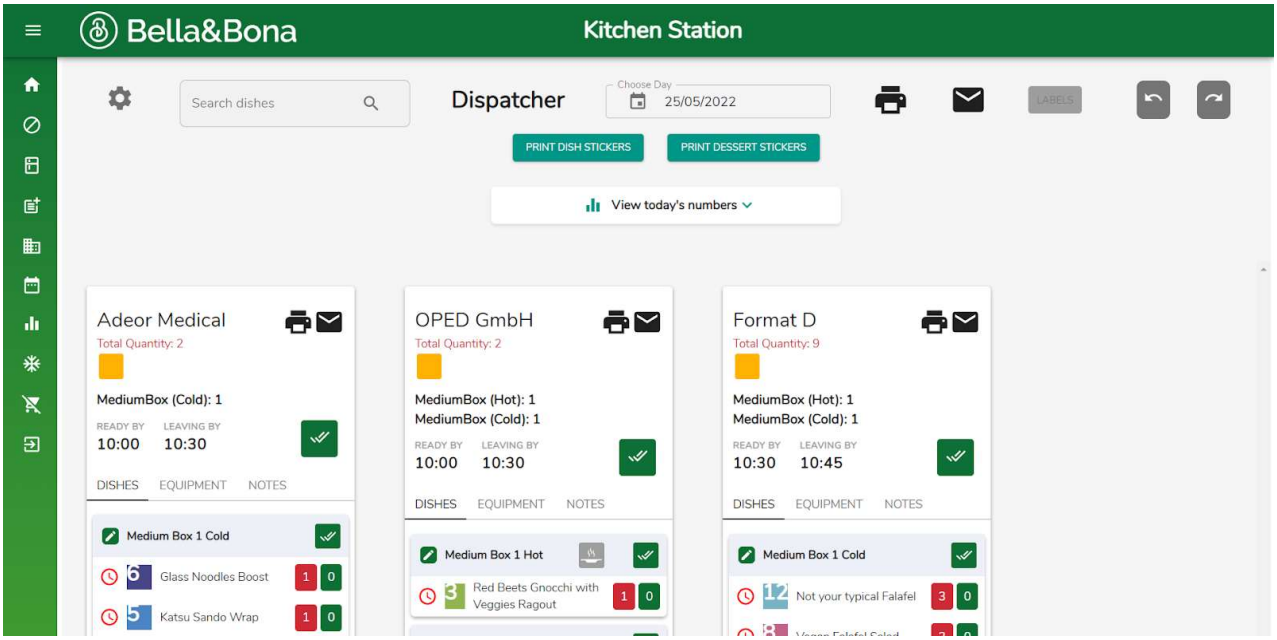
- ***Processing Lane:-***
    - *Before coming to the kitchen all the orders with the same type of dish are combined and a total count representing the number of dishes is passed to the kitchen.*
    - *At this stage the list of dishes has entered the kitchen, It is basically a pending list that are yet to be performed.*

- **In Kitchen Lane:-**
    - *As soon as the chef gets free in the kitchen (Any dish is finished, the next type of dish is entered from the processing stage.*
    - *For each next type of dish we can decide as to how many qty to be sent to the next stage.*

- **Completed Lane:-**
    - *As soon as the dish is made it enters into the completed stage.*
    - *Here the kitchen work gets over.*

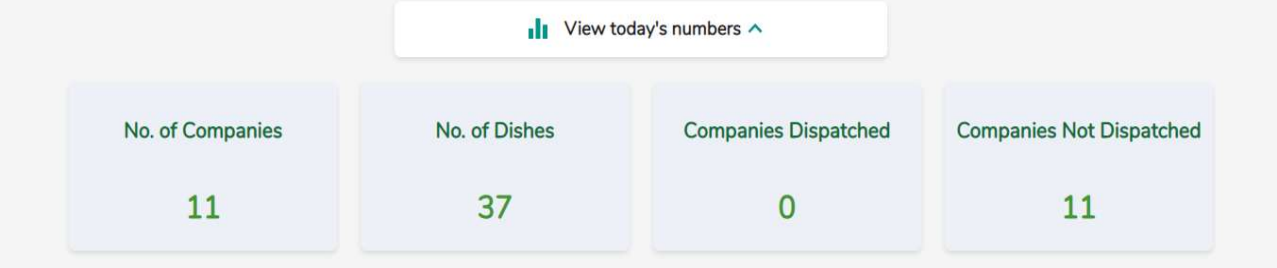
- ***Dispatcher:-***

    - *This is the next step right after the kitchen processes.*



- *It shows the daily stats at that moment of time, like:*

- *Number of companies*
- *Number of dishes*
- *Companies dispatched*
- *Companies not dispatched*



- *Simple Logic ⇒*
  - *No. of Companies = Companies dispatched + Companies not dispatched*

- *It consists of a list of orders (shown in the form of cards) with status as dispatched (OR) pending.*

Pending status

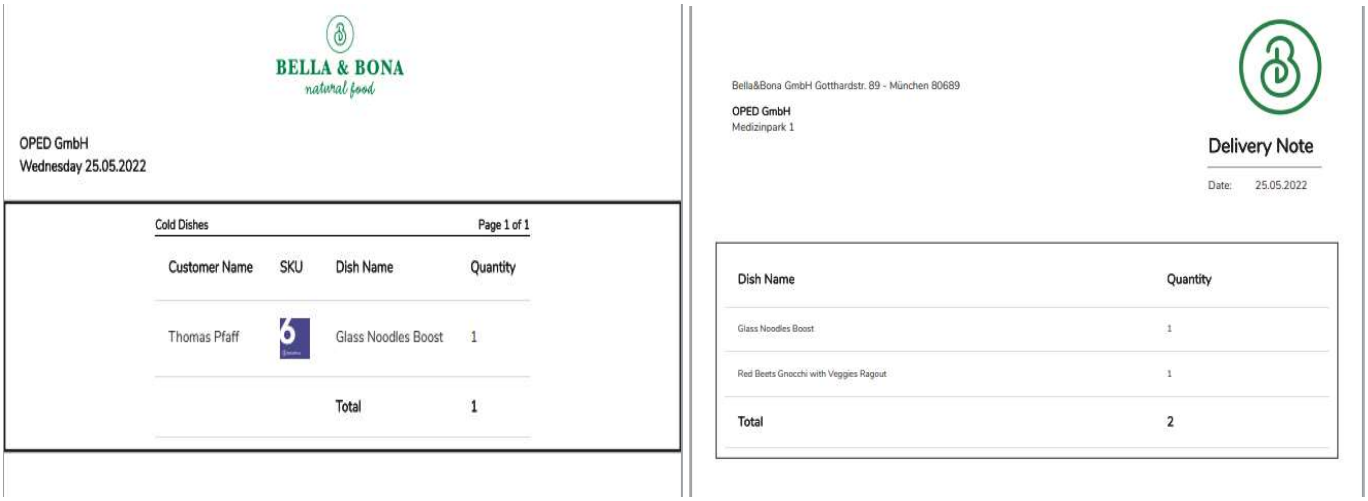
Dispatched status (card disabled expect this)

- *Each order has two timestamps:*
  - *Ready By (time by which the dish should be prepared)*
  - *Leaving By (time by the dish have to be dispatched to the company), (Is set based on the distance to be travelled)*

- *Each order has the company branch name at the top, total quantity of dishes, provision to print order details, provision to print order delivery note is provided.*

- *There are basically three types of box:*
  - *Big Box ⇒ Capacity of 24 dishes*
  - *Medium Box:*
    - *Hot ⇒ basically for storing hot food. (capacity - 6)*
    - *Cold ⇒ basically for storing cold food. (capacity - 12)*
  - *Small Box ⇒ Capacity of 4 dishes.*

- *The sample of order details and delivery note are:*



BELLA & BONA
natural food

OPED GmbH
Wednesday 25.05.2022

Cold Dishes — Page 1 of 1

Customer Name	SKU	Dish Name	Quantity
Thomas Pfaff	6	Glass Noodles Boost	1
		Total	1

Bella&Bona GmbH Gotthardstr. 89 - München 80689

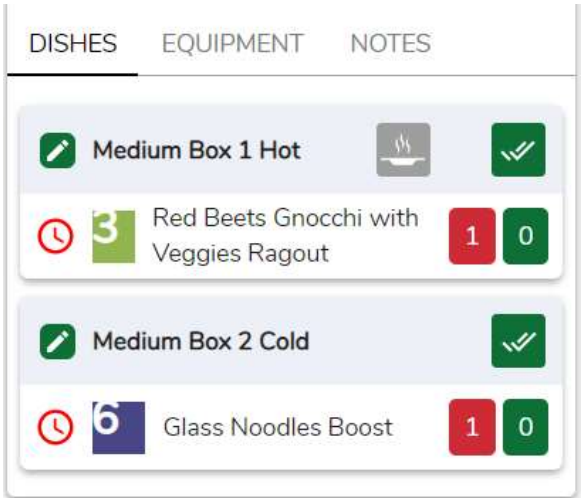
OPED GmbH
Medizinpark 1

Delivery Note

Date: 25.05.2022

Dish Name	Quantity
Glass Noodles Boost	1
Red Beets Gnocchi with Veggies Ragout	1
Total	2

- *For each dish there are three sections*
  - *Dishes*
  - *Equipments*
  - *Notes*



- *In the dishes section, all the dishes in the order are displayed along with:*
  - *Separated on basis of box used (hot & cold)*
  - *Each box has a status as packed or unpacked.*
  - *A provision to edit the box name.*
  - *Each dish has a two counts*
    - *Red box ⇒ Quantity of undispatched dish*
    - *Green box ⇒ Quantity of dispatched dish.*

- *In the top of the page, there are two options:*
    - *Print Dish Stickers ⇒ prints stickers for all the dishes*
    - *Print Dessert stickers ⇒ prints stickers for all the add ons.*