OCTOPI Web Application

(Release Version 1.1.3)

User Manual

(As of 16th May 2022)

Contents

Introduction

The OCTOPI web application is a web-based tool developed for use by Terminals through the planning of vessel calls, vessel port calls in time and space, berth, berth configuration, providing easy visibility and planning/re-planning controls, highlighting planning conflicts like overlapping berths, overlapping departure and arrival, conflicting vessel and berth draft, suitable vessel types and more, and easily identifying available berths for upcoming vessel call, vessel port calls.

Berth planning is often put on a level with berth allocation problem. In practice, all planning deals most of the times with a diversity of resources which are often limited (e.g., the quay length, time, availability of equipment and staff, vessel sizes, tide, berthing draft, weather conditions, service schedules, etc.)

The main objective of berth planning is to find – from the terminal perspective – optimal berth allocations for vessels of the liner services which are intended to be operated by the terminal.

Due to the amount of different parameters which need to be considered to find an optimal solution for the terminal the berth allocation problem is already scientifically analyzed several times. Vessels arrive over time and the terminal operator needs to assign them to berths to be served as soon as possible.

System Overview

The OCTOPI web application has the following functionalities:

1. User Management
2. Berth Scheduling
3. Data Entry
4. Reporting
5. Data Import/Export
6. Consistency
7. Completeness
8. Notification
9. Resource Allocation
10. Delay Tracking

Contact

Request for Access to, inquires on the use of the software and comments on the design and functionalities of the application should be sent to the dedicated e-mail address 2012111357@ub.edu.bz.

Getting Started

User Access, Roles and Privileges

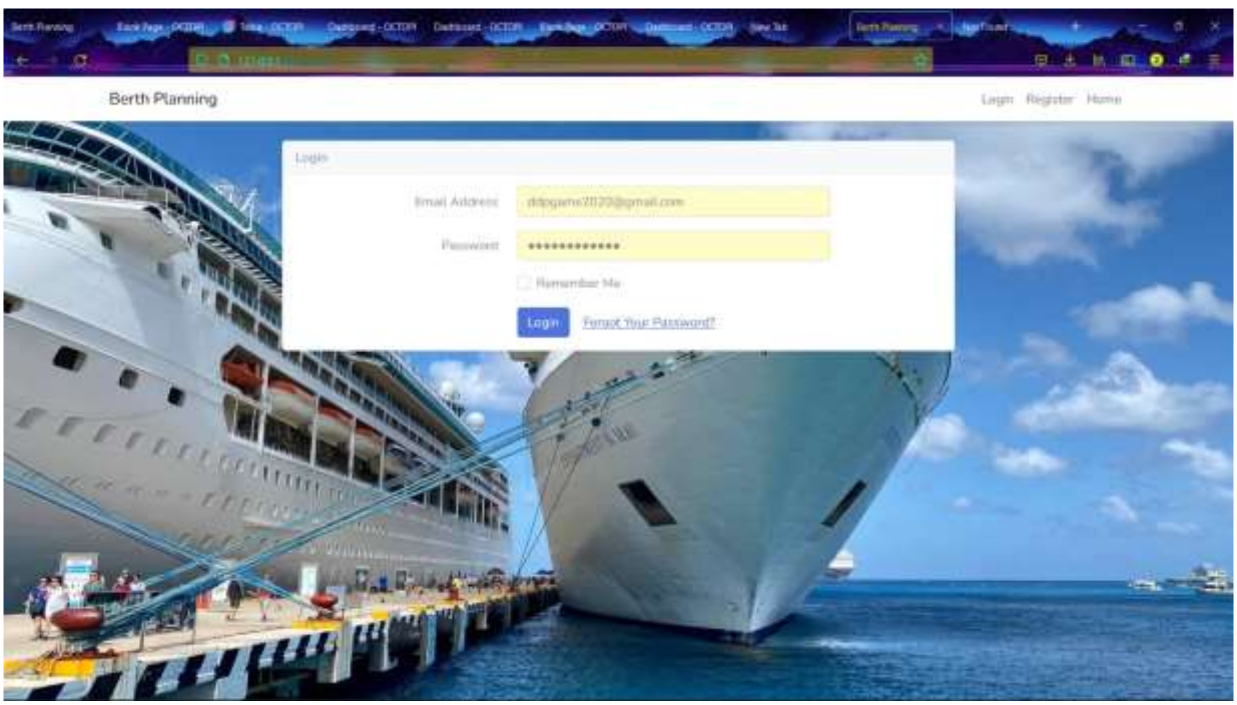
Each user access and views depend on the title of the individual. Managers and Supervisors will have the access to create, update, read and delete data from the application. Other users would just be able to view the schedule and get notifications of changes made.

How to Access OCTOPI web application

Open any internet browser (i.e. Internet Explorer, Firefox, Chrome, etc.) and type in the following URL https://www.octopiberthapp.com in the address bar. (Figure 1)

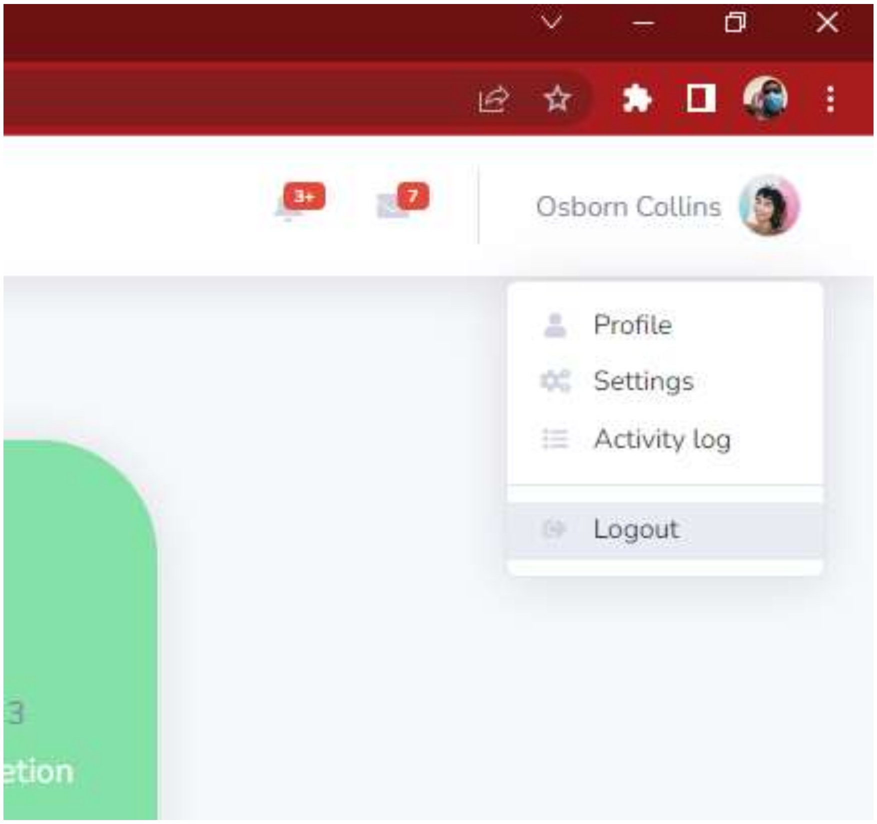
Figure 1. Using Chrome Browser

Figure 2. Login Page



To **log-in**, enter the username and password and click on the "Login" button.

Figure 2. Log out button

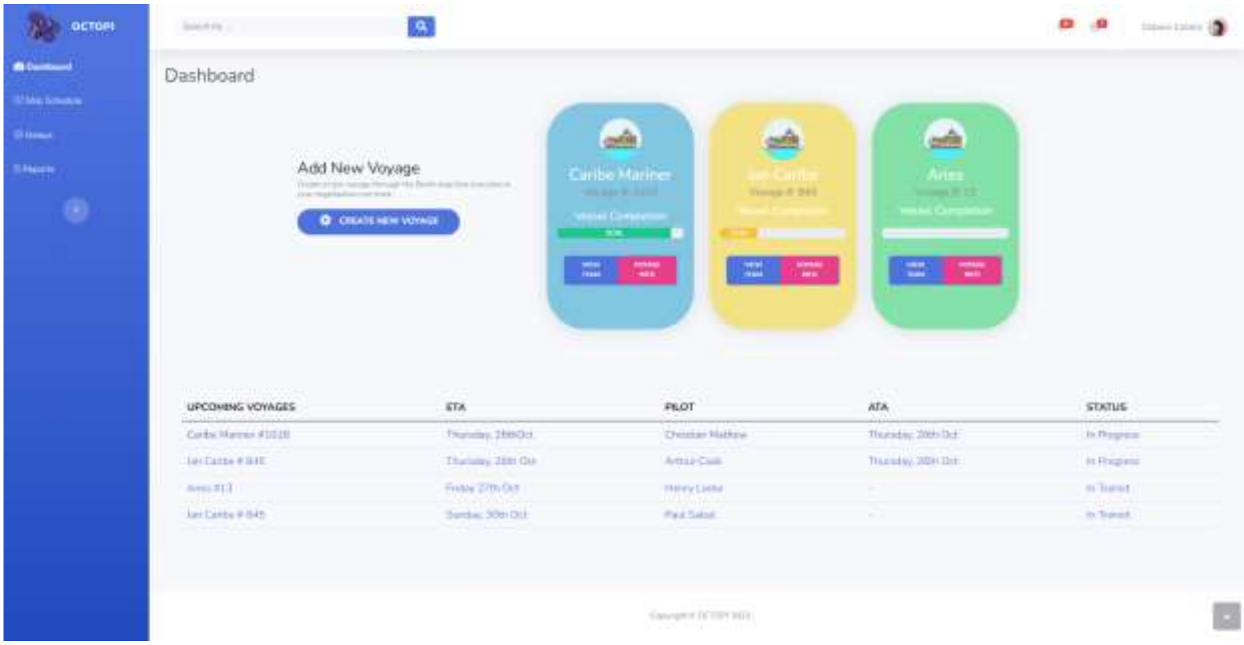


To **Log out**, users can click the profile picture at the top right-hand corner and if they scroll down through the menu, they will see the "Log Out" button.

Add Voyage

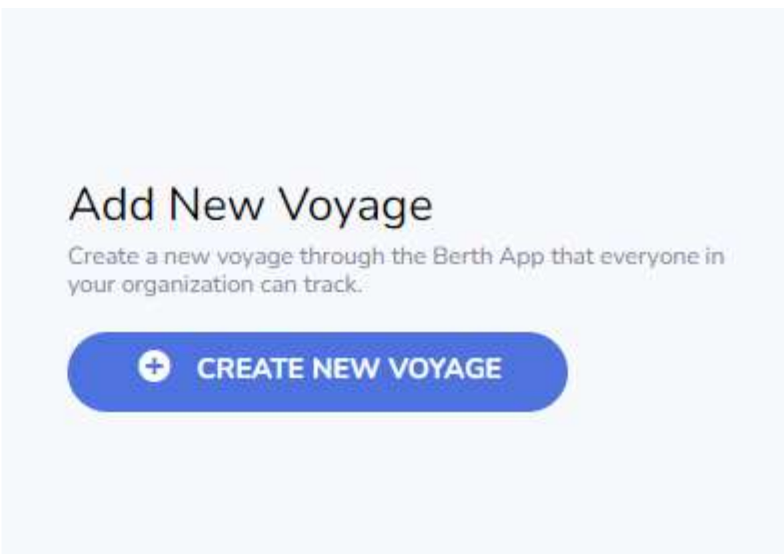
After logging in, users will be taken to the main dashboard page. Depending on your role, you will be able to create and update a voyage. The users who will be able to perform a create and update will be the users with role "System Administrator", "Manager", "Supervisor".

Figure 3. Dashboard



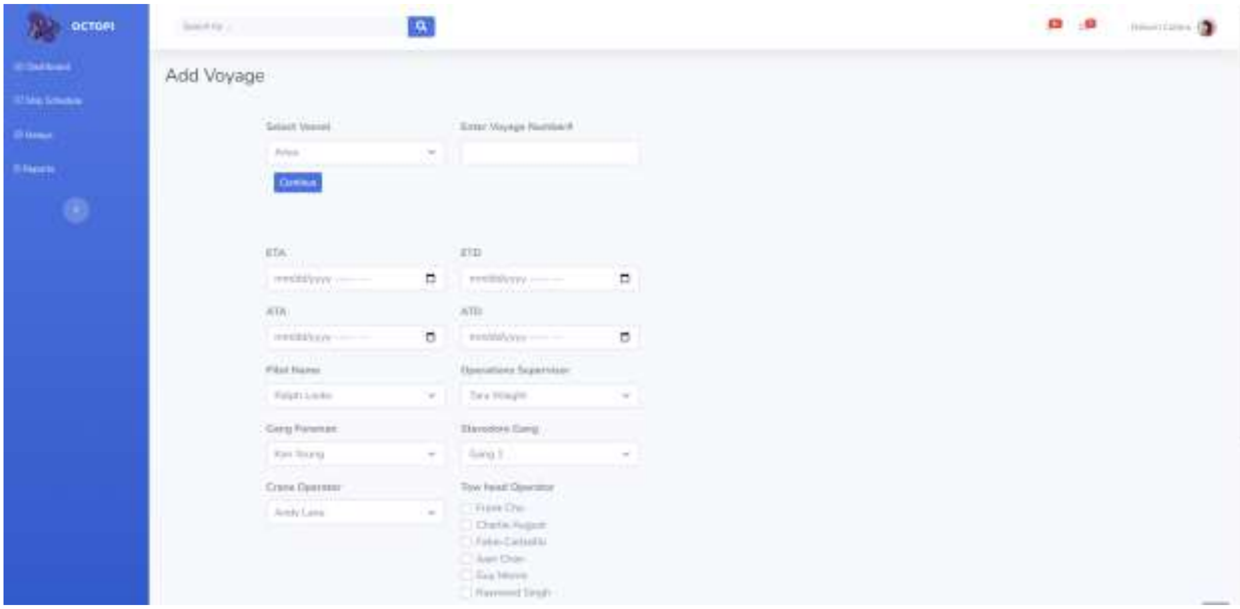
After logging in, you will be taken to main dashboard. On the dashboard there will be a "Create New Voyage" button. After clicking this button. User will be taken to the Add New Voyage Form.

Figure 4. Create New Voyage Button



"**Create New Voyage**" button

Figure 5. Add Voyage Form



Next step is to fill out the form with all the necessary information and click the "Submit" button. From there the voyage will be added to the database and displayed on the dashboard and in the schedules tab.

Add Delays and Close Delays

The main Nav bar is located at the left-hand side which can help you navigate to different features throughout the application. To view the delays, you must click the delays button in the Nav Bar.

Figure 6. Nav Bar

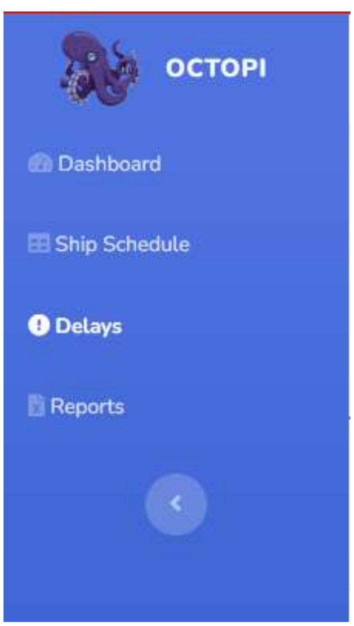
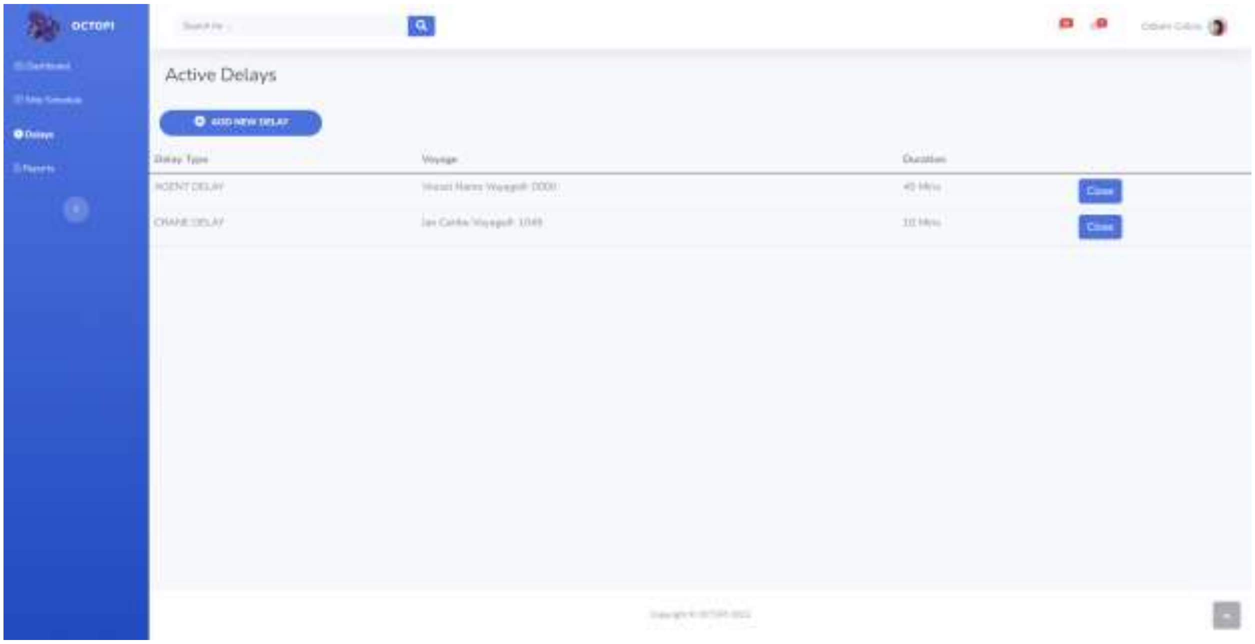
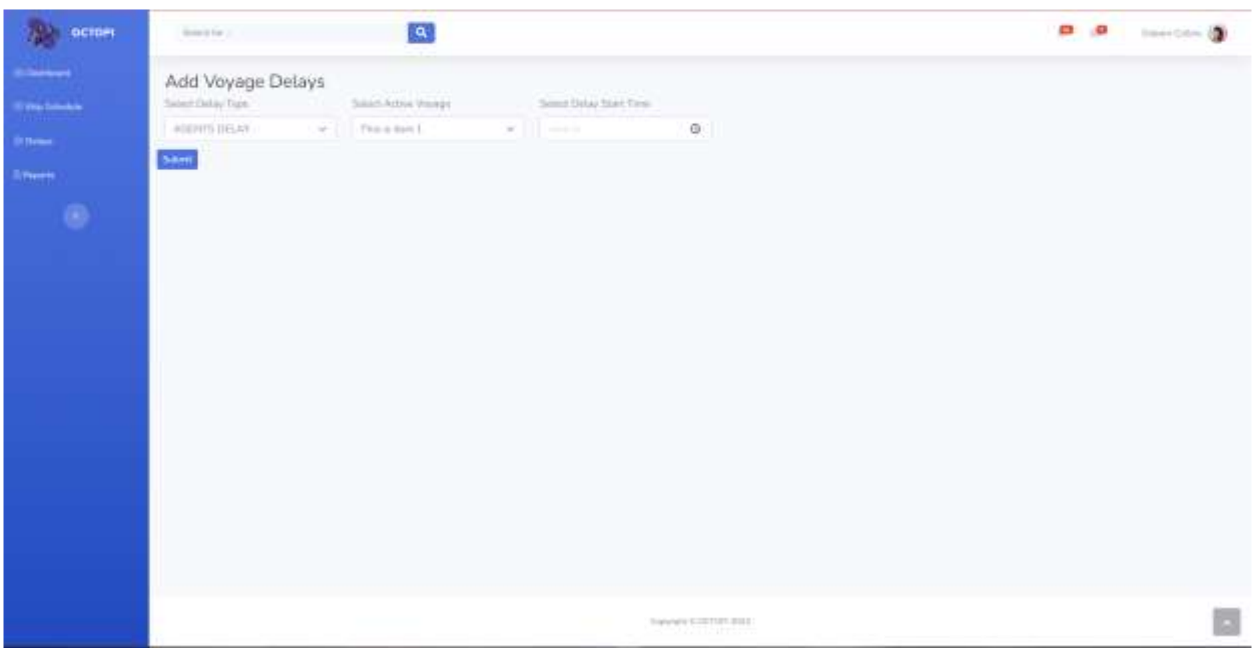


Figure 7. View Delays



At this screen you will be able to view all Delays per voyage. For each delay there will be a close button which basically indicates that this delay is not active and has been resolved. To add a delay simply press the "Add New Delay" button right above the table of delays. This will then take you to a form where you must enter the delay type and other delay information.

Figure 8. Add Delays



System Administrator

Upon logging in the System administrator dashboard will show a list of all ship that are in port, a scheduled to arrive and have departed the port. The status of the vessels listed will be displayed. The system manager will be able to click the update, delete or add button for a vessel. Upon entering the required information, the user will be asked to confirm the choices made. The information will be updated in the database.

The Systems Administrator will be presented with a user's icon. Upon clicking this icon, the user will be able to add a user, update a user's account, suspend and account or grant access to a user. Upon confirming the requests, the user will return to the main dashboard.

CEO, Senior Management

The CEO and Senior management's dashboard will list various ship details (expected, in port or departed), notification of the status of ships (delayed, departed, offloading and loading), and working teams. This group of users will have a button to generate reports. Upon clicking the button, they will be prompted to enter various filters. After the request have been confirmed and sent the report will be displayed on the dashboard. The user will be able to print the report or have the option to return to the main dashboard.

Operations Manager, Supervisor and Team

The dashboard for both the Operations manager and the Operations Supervisor, will show notifications of when a gang starts working on a vessel, delays that have been logged and the overrun of a targeted delay. Both users will be provided with a button to log delays. Upon clicking this button, a user will be able to input the relevant information into a form and click save to input the information into the database. The user will be returned to his/her main dashboard. The listing of ships on the dashboard will have and update button which can be used to input updated information about a vessel. Upon clicking the user will be prompted to enter the relevant information on a page. Upon submitting the user will be returned to the main interface.

The Operations supervisor will have additional functionality on his dashboard. Operations supervisor will have the ability, on their dashboard, to see work schedules and delays, can create schedules, report delays. When the icon for creating schedules and reporting delays are clicked by the user a form will be launched. The form filled in and created/submitted can be submitted to be logged in the database or cancelled. Upon completion the user returns to his/her main dashboard.

Gang foreman, Stevedore, Machine Operators, Marine Team, and Pilot

These users will have the least functionality. Upon logging in on the application these users will

Be presented with their dashboard. These users will only be able to view their working schedules and get notification of delay and their working schedules. These will be loaded on the dashboard upon the user click the appropriate icons – "show schedule" and "show notification".

The Marine Team will have one additional functionality on their dashboard, which will be to update a ships schedule. These users will be provided with an update schedule button on their dashboard. Upon clicking the button, a form will be shown on the screen the relevant information will be inputted and saved.

Shipping Agents

Shipping agents upon logging in will only be able to view the data directly related to their vessel on their dashboard. They will be able to select and view the status of all their vessels. Shipping agents will be provided with a button to update their ships arrival and departure date and times.

Technical Team

The technical team will have on their dashboard details of the ship(s) currently be load and unloaded. They will have the ability clearly shown on their dashboard the lists of vessels. Upon clicking a vessel name updated details of the vessel will be displayed. The technical team will also have the ability to update report delays. As will all the other users a report delay button will be displayed. Upon clicking the icon, the user will fill in the relevant information and click save to lodge the data in the database. This information will be available and relayed to all users.