Currency Exchange Rate Dashboard User Manual

Abstract

This document serves the purpose of guiding the users on using the currency exchange rate dashboard application that is deployed as a web application by using Heroku as the platform. The link to the dashboard application is stated below.

Currency Exchange Rate Dashboard

https://currency-exchange-rate-fe.herokuapp.com/

The main objective of this web application is to provide a dashboard in helping the users to visualize and analyze the trends of currency exchange rate. The usage of the dashboard application is separated into different use cases. Each use case includes a unique ID (for searching purpose), description of the use case, step by step guidance with the pictures, the roles of the user which are involved in the use case and the expected final result.

Notes: The interactions with the application sometimes may not be responding due to the limited resources when using free-tier subscriptions on the Heroku platform which causes the Frontend and Backend servers to be deployed as different servers. This causes the possibility that the Backend server is booting when the HTTP requests are made by the Frontend server. Please try it again after about 20 seconds if any of the actions is not giving a valid response.

Terminologies

Vocabulary	Description
Visitor	One of the user roles. It defines the user who is not logged in yet. They only have access to the landing pages which are the home page and login page of the website.
Admin	One of the user roles. It defines the user who has logged in as the admin. They have full access to the application.
Developer	One of the user roles. It defines the user who has logged in as the developer. They have access to everything in the application except for the list of users.
Viewer	One of the user roles. It defines the user who has logged in as the viewer. They access everything in the application except for the list of the users and adjust different features and algorithms used in the control panel.
Home Page	The landing page for the users who access the website
Login Page	The page for the unauthenticated users to login with their username and password
Logout Page	The page for the authenticated users to logout from their accounts
Change Password Page	The page for the authenticated users to change the password for their accounts
User Profile Page	The page for authenticated users to view their own profile, editing profile and password
User List Page	The page that shows the list of users available and their information
Dataset Page	The page that consists of a table which shows the dataset being used for the model developments and visualizations
Statistics Page	The page that consists of the statistics data of the dataset and the model performance evaluation
Dashboard Page	The page that consists of few interactive visualizations that could help in visualizing and analyzing the currency exchange rate

Control Panel	The control panel that will be shown only in Statistics Page and Dashboard Page which is used to control the features for the predictive model to be used		
Actual vs Predicted Graph	A chart that is shown in the Dashboard Page for the users to visualize the trends of the currency exchange rate and the predicted currency exchange rate		
Rate Conversion Panel	The panel in the Dashboard Page for the users to convert the values between the currencies		

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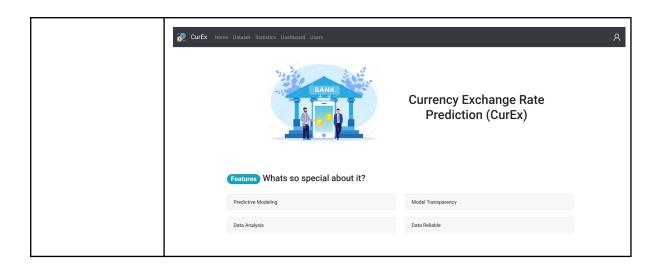
User Accounts

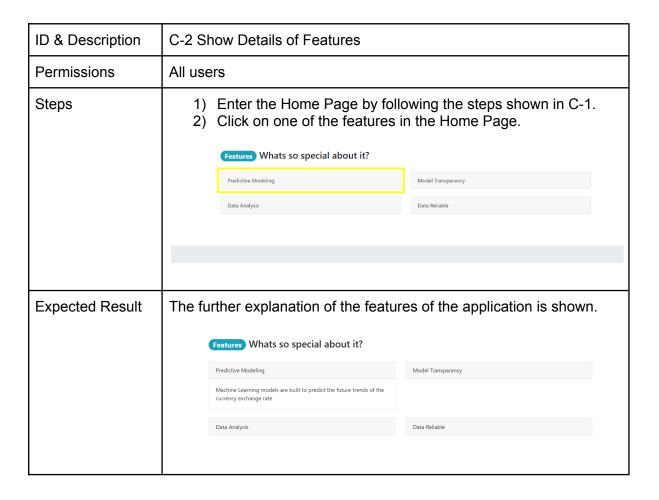
Here listed the user accounts available on the website:

Role	Username	Password
Admin	admin	admin
Developer	developer	developer
Viewer	viewer	viewer

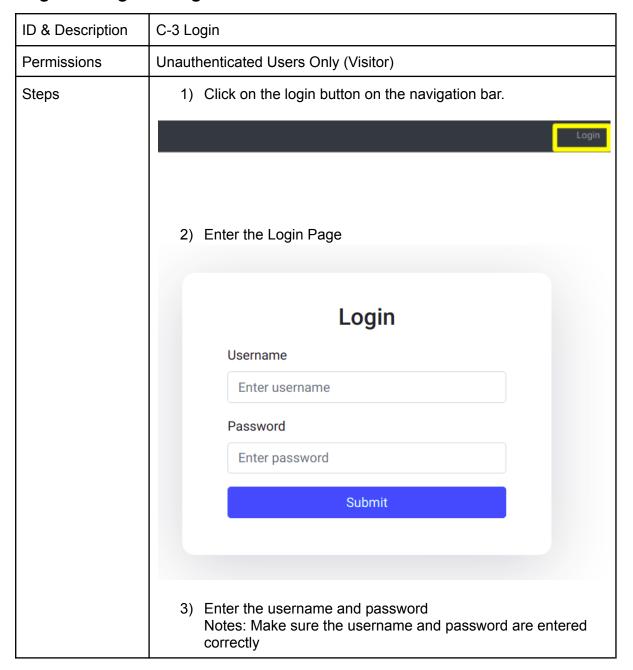
Home Page

ID & Description	C-1 Access Home Page				
Permissions	All users				
Steps	There are few ways to access the Home Page: I. User enters the website: 1) It is the first page to be seen when user access the website II. User logout from his/her account: 1) Click on the "Back to Home Page" button				
	You have been logout Click on the button below to return to the home screen.				
	Click on the button below to return to the nome screen. Back to Home Page				
	III. User is on the another page of the website: 1) Click on the logo, logo name or the "Home" button on the navigation bar. Currency Exchange Rate Prediction (CurEx)				
	Features Whats so special about it?				
	Predictive Modeling Model Transparancy				
	Data Analysis Data Reliable				
Expected Result	User enters the Home Page				



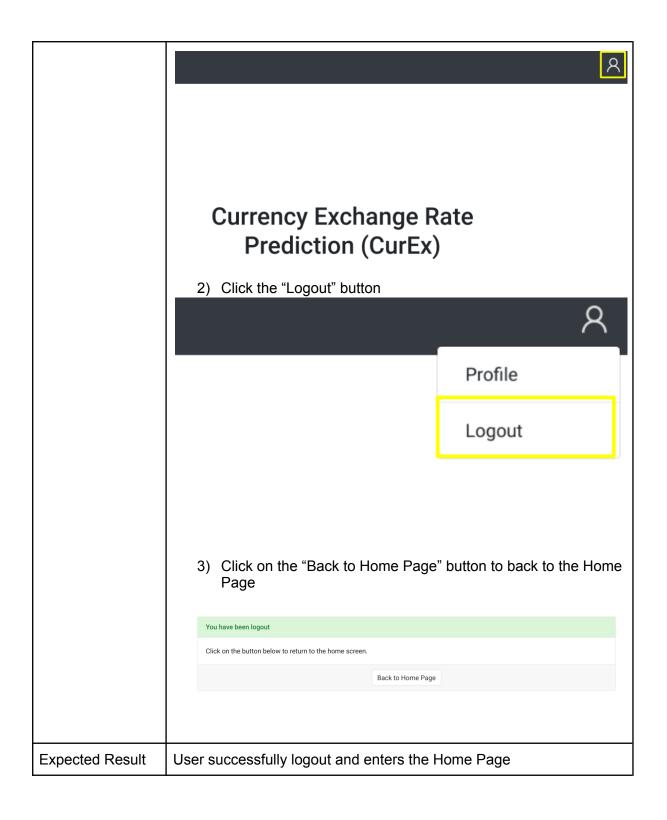


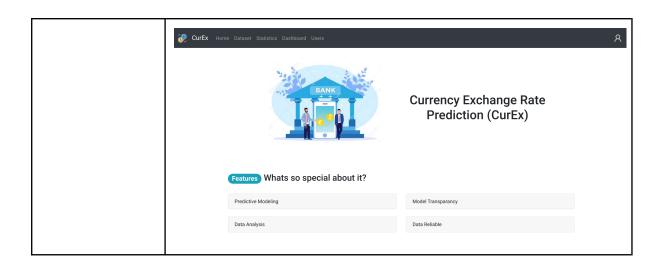
Login & Logout Pages



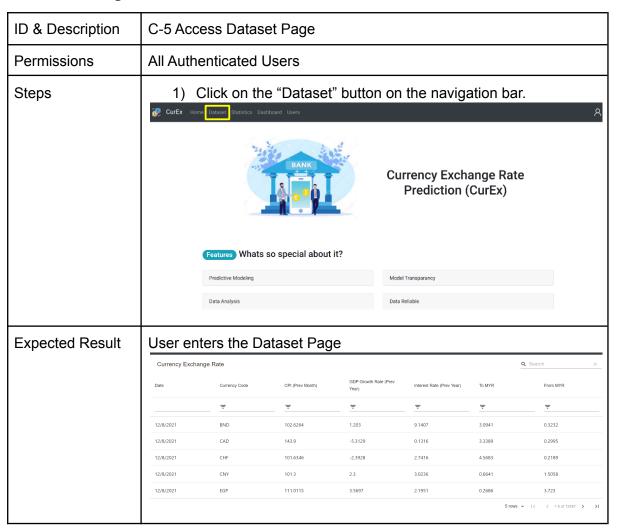
	Login												
	Username												
						admin							
					Pa	asswor	d						
						•••••							
								Subr	nit				
		4	,	OI:	الداداد	h = "O	laa :4" la	.44					
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Expected Result	Su Lis	icc st F	es Pa	sfu ge.	ılly l	ogin a	s an use	r and b	eing re	directed	d to th	ne Dashbo	oard
	Da	shbo	ard Li	st							٩	Search	× +
			Actions	s	Shift ID	Assembly Code	Begin Time	End Time	Expected Cycle	Regulation Loss	Event Loss	Expected Product Count	Status
	>	<i>6</i> 8	i	ō	5	M1	2021-10-17 12:00:25	2021-10-17 13:01:25	7	117	89	10	Idle
	> 	<i>8</i> 8	i	Ô	4	M1	2021-10-16 17:30:00	2021-10-16 17:40:00	8	100	50	8	Idle

ID & Description	C-4 Logout			
Permissions	All Authenticated Users			
Steps	1) Click on the user icon			

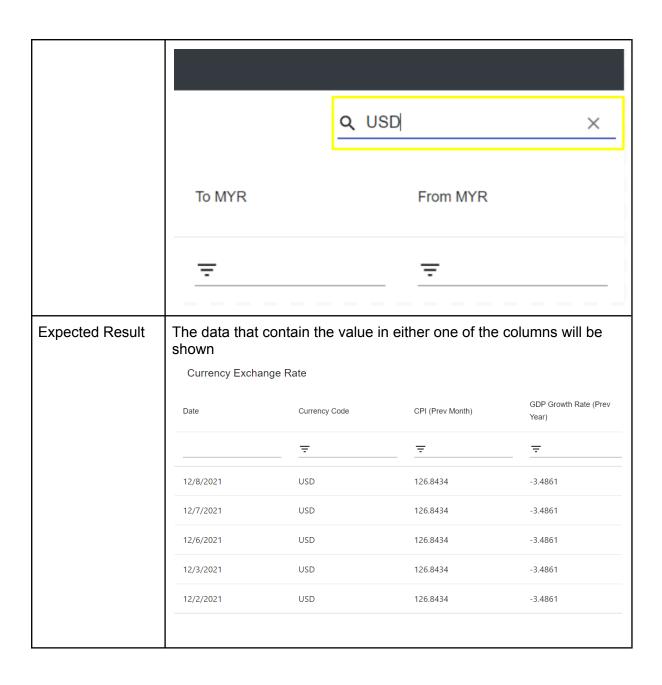




Dataset Page



ID & Description	C-6 Filter Data by All Columns			
Permissions	All Authenticated Users			
Steps	 Enter the Dataset Page by following the steps shown in C-3. Enter the values to be searched. 			



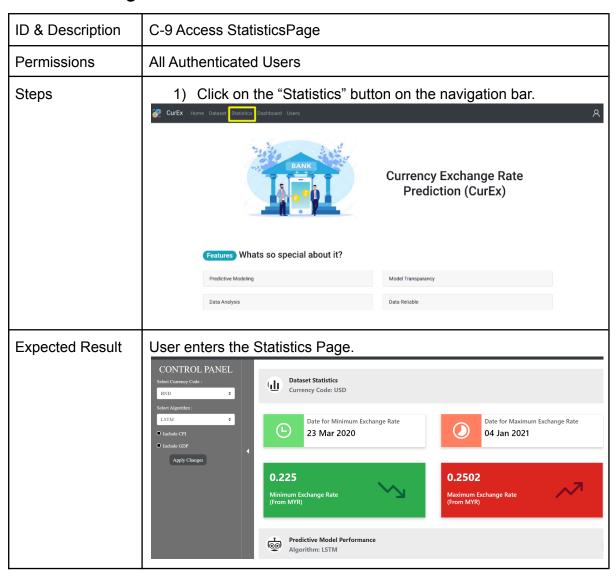
ID & Description	C-7 Filter Data by One Column						
Permissions	All Authenticated Users						
Steps	Enter the Dataset Page by following the steps shown in C-3. Enter value on the column that is wished to be filtered. Currency Exchange Rate Date Currency Code CPI (Prev Month)						
	December 2nd	₹	후				

Expected Result	The data that contains the value in the selected column will be shown. Currency Exchange Rate							
Date Currency Code CPI (Prev Month) GDP Growth R Year)								
	December 2nd	<u>=</u>	=	-				
	12/2/2021	BND	102.6264	1.203				
	12/2/2021	CAD	143.9	-5.3129				
	12/2/2021	CHF	101.6346	-2.3928				
	12/2/2021	CNY	101.3	2.3				
	12/2/2021	EGP	111.0115	3.5697				

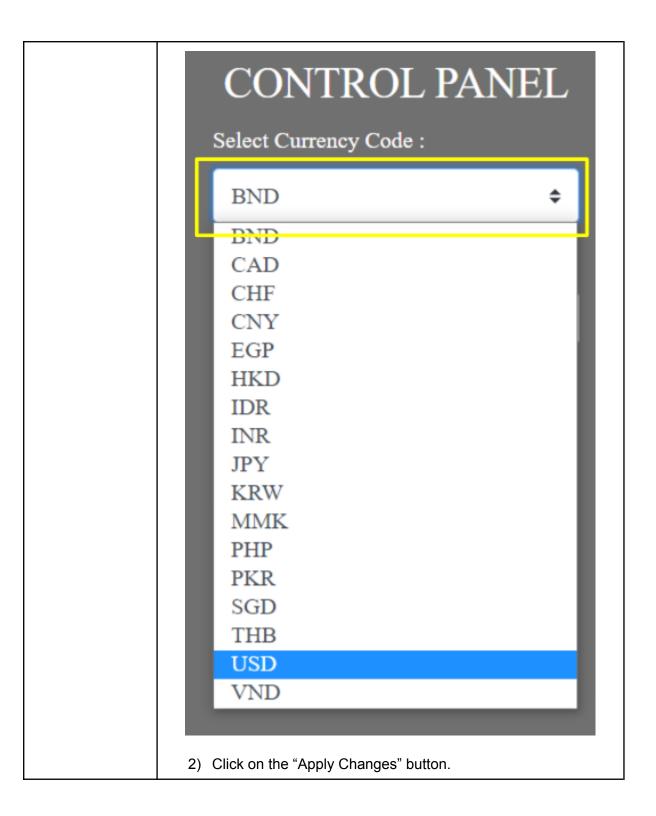
ID & Description	C-8 Sort Data by One Column			
Permissions	All Authenticated Users			
Steps	 Enter the Dataset Page by following the steps shown in C-3. Click on the header of the column that is wished to be used to sort the data. 			

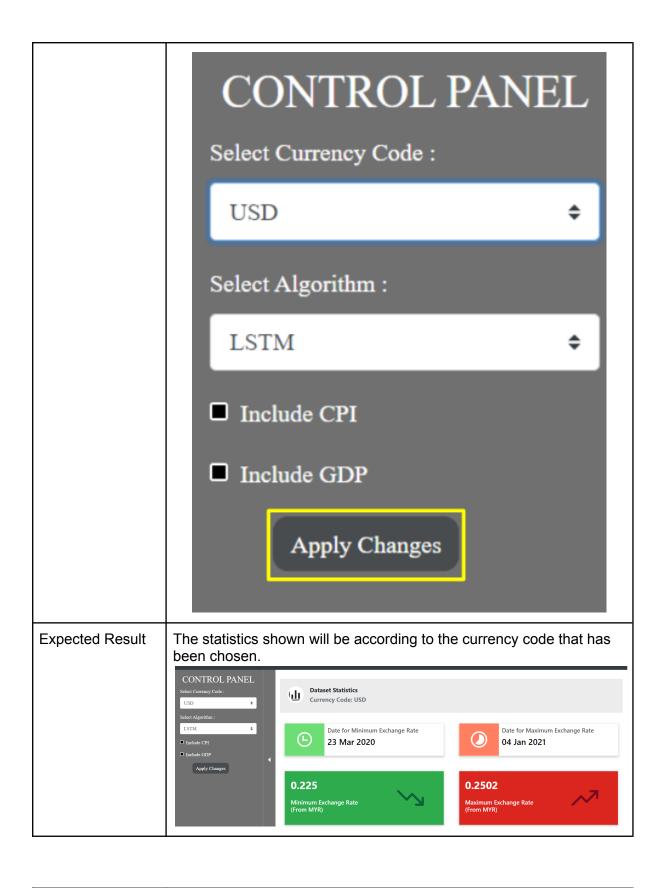
		EGP			
Expected Result	The data s	nown wi	II be sorted by th	ne selected colum	GDP Growth Rate (Prev Year)
			₹	-	=
	12/8/2021		BND	102.6264	1.203
	12/7/2021		BND	102.6264	1.203
	12/6/2021		BND	102.6264	1.203
	12/3/2021		BND	102.6264	1.203
	12/2/2021		BND	102.6264	1.203

Statistics Page

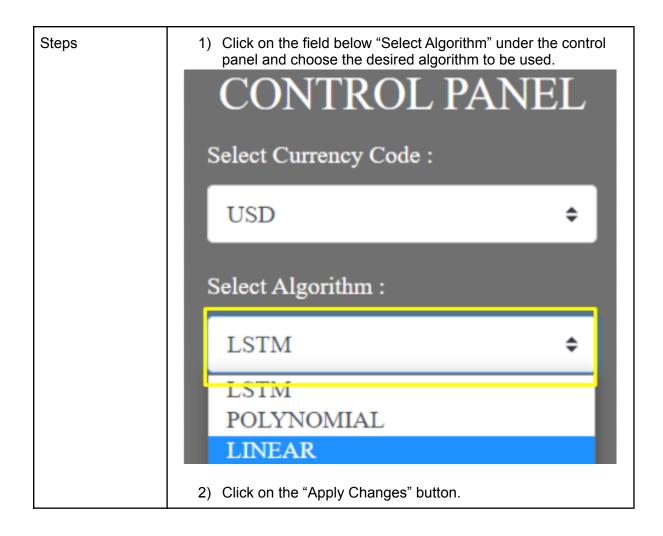


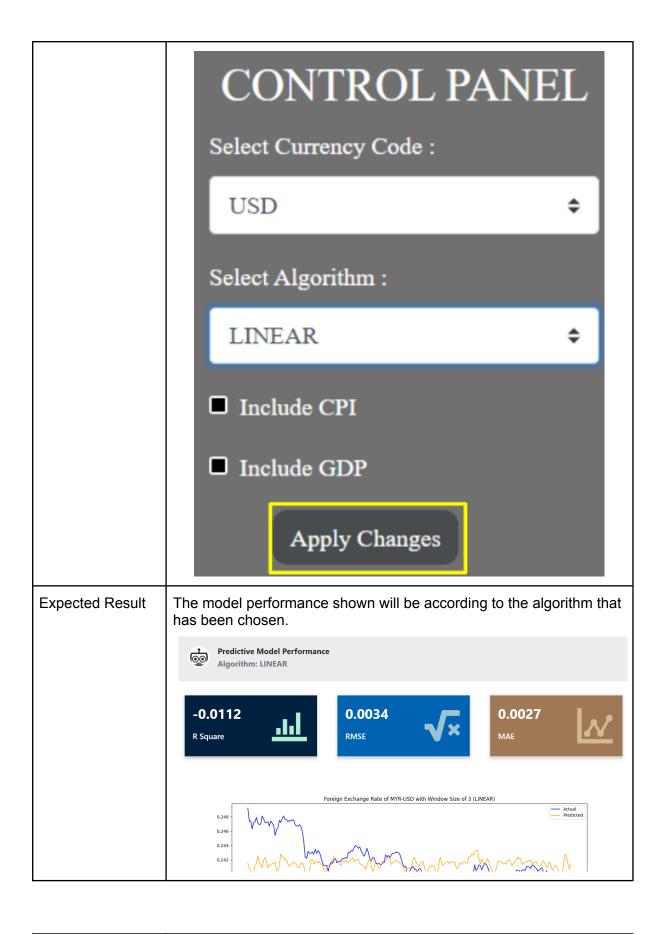
ID & Description	C-10 Select Currency Code in Statistics Page
Permissions	All Authenticated Users
Steps	Click on the select field below "Select Currency Code" under the control panel and choose the desired currency code.



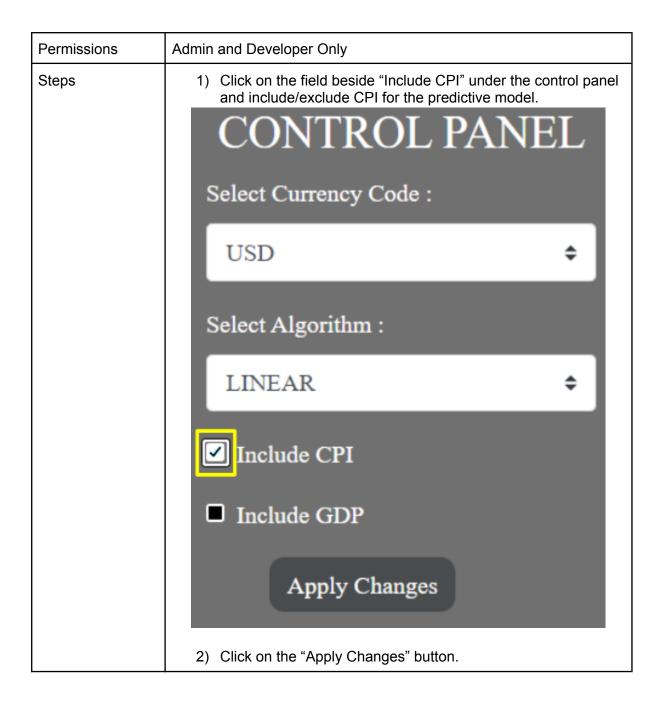


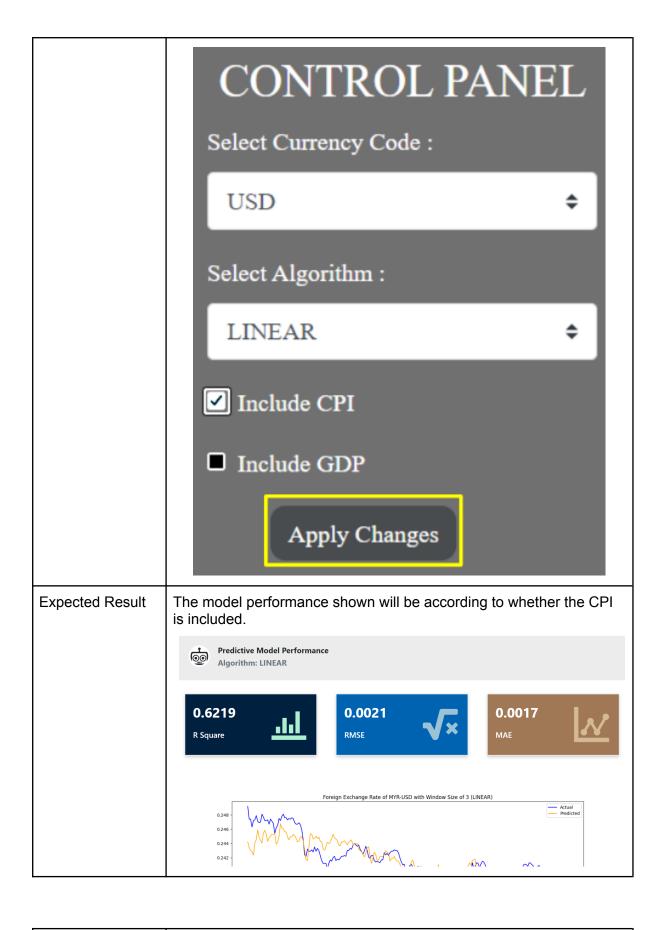
ID & Description	C-11 Select Algorithm in Statistics Page
Permissions	Admin and Developer Only



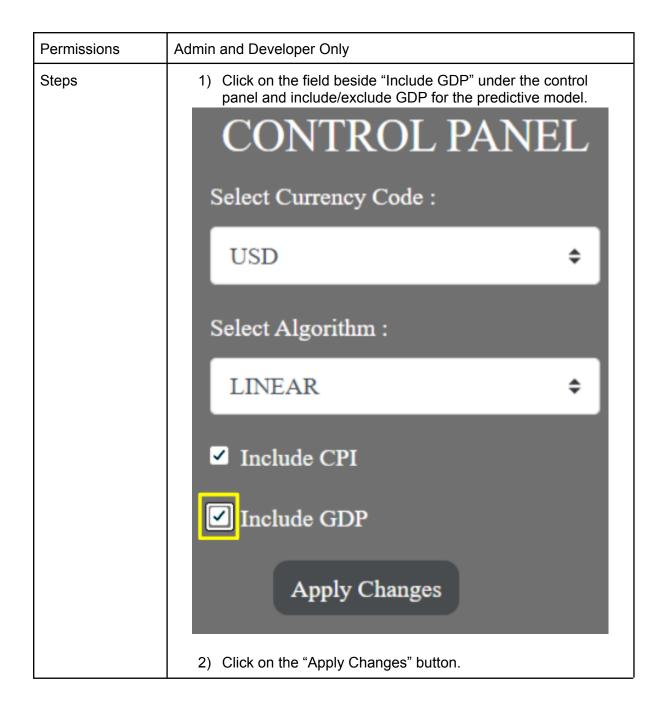


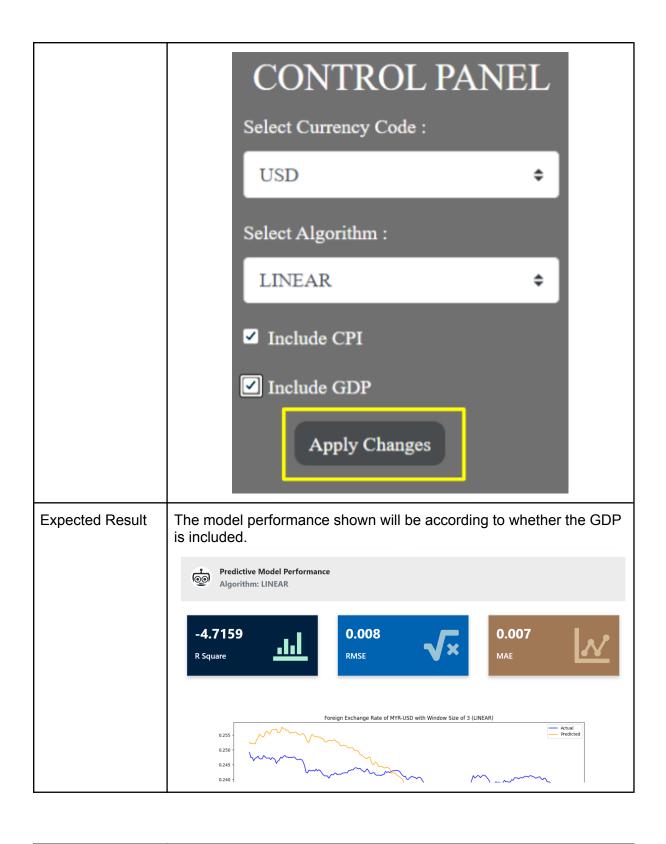
ID & Description	C-12 Include CPI in Statistics Page
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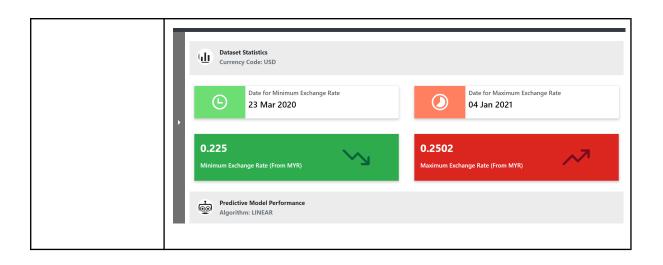
ID & Description	C-13 Include GDP in Statistics Page
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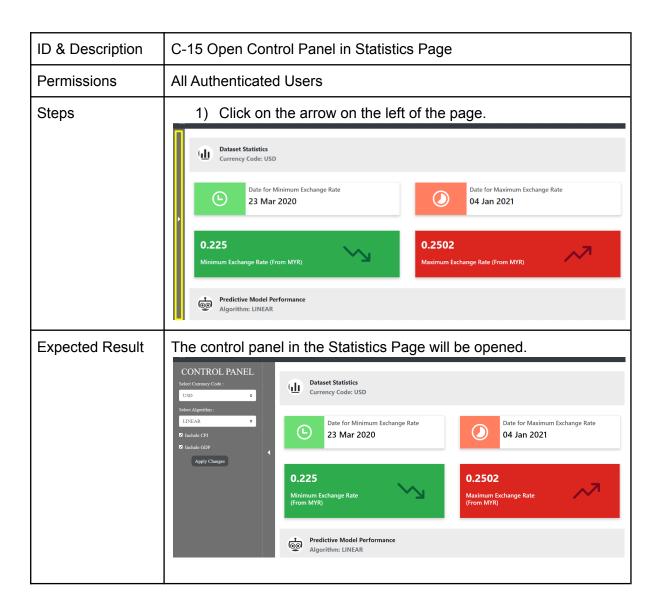




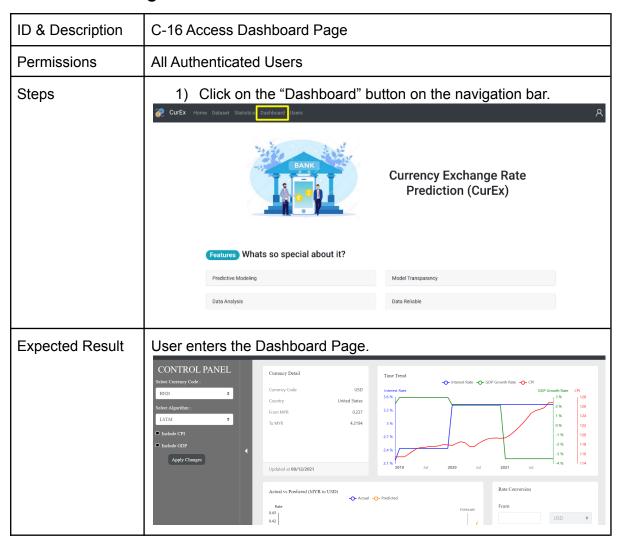
ID & Description	C-14 Close Control Panel in Statistics Page
Permissions	All Authenticated Users
Steps	Click on the arrow beside the control panel.

	CONTROL PANEL	
	Select Currency Code :	
	USD \$	
	Select Algorithm :	
	LINEAR \$	
	☑ Include CPI	
	✓ Include GDP	
	Apply Changes	
Expected Popult	The control panel in the Statistics Page will be closed	
Expected Result	The control panel in the Statistics Page will be closed.	

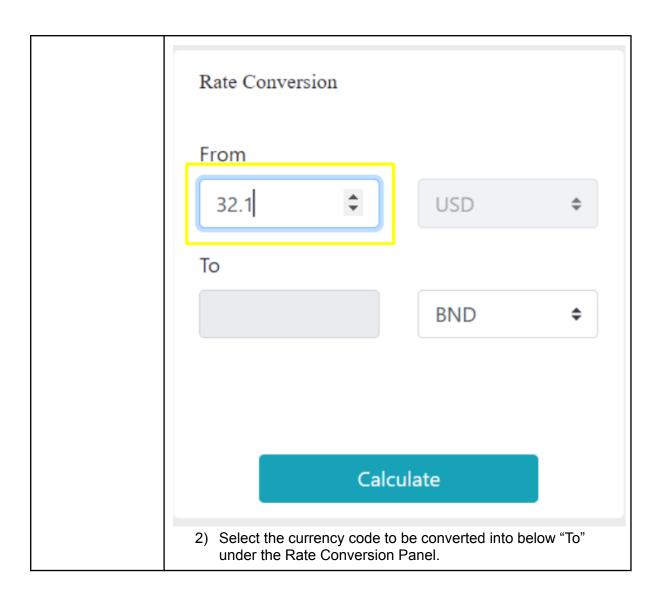


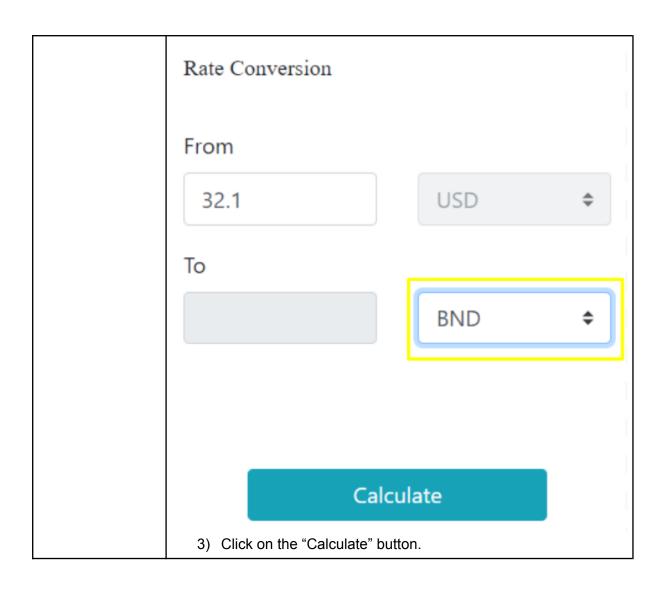


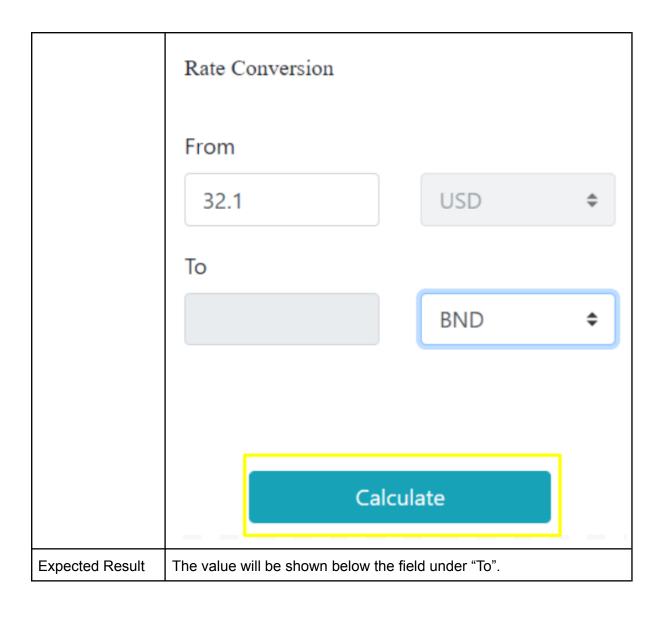
Dashboard Page

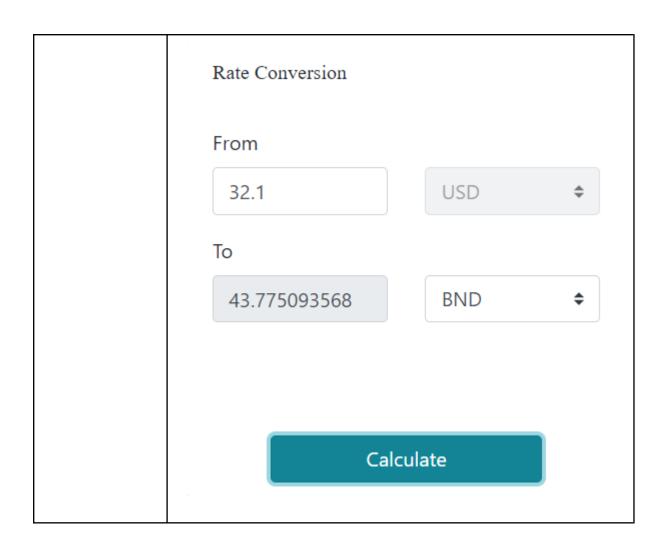


ID & Description	C-17 Convert Currency Code
Permissions	All Authenticated Users
Steps	Enter a numeric value below "From" under the Rate Conversion Panel.

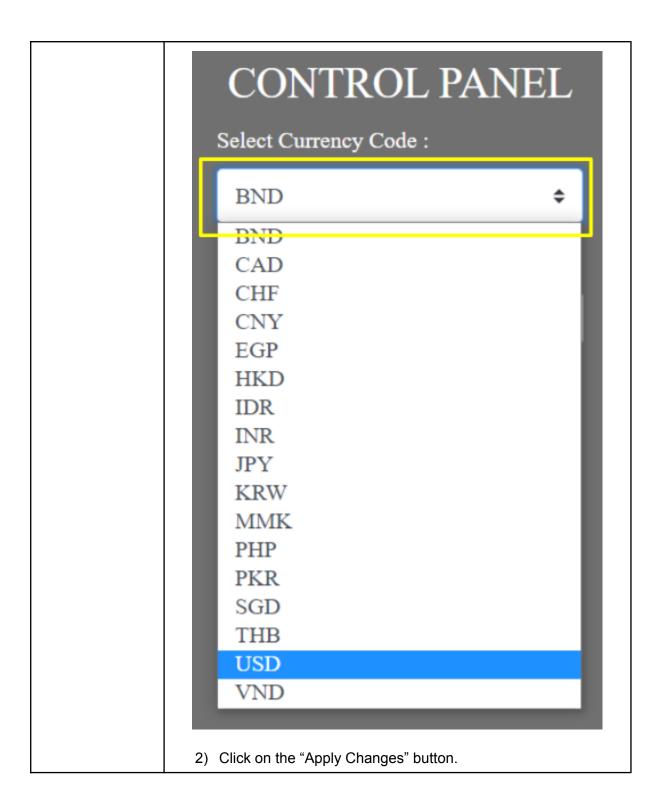


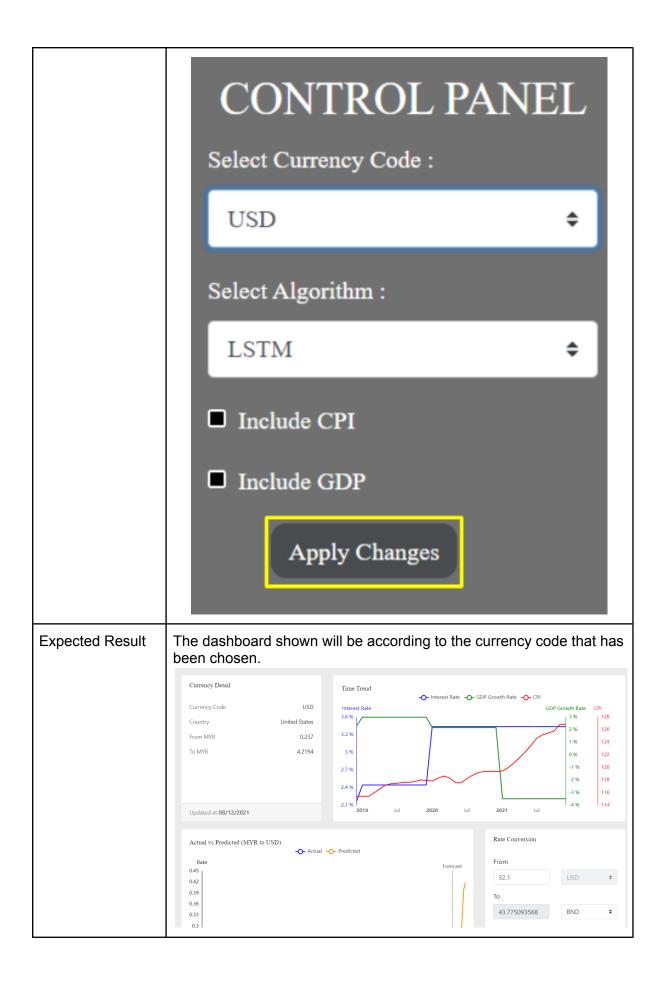


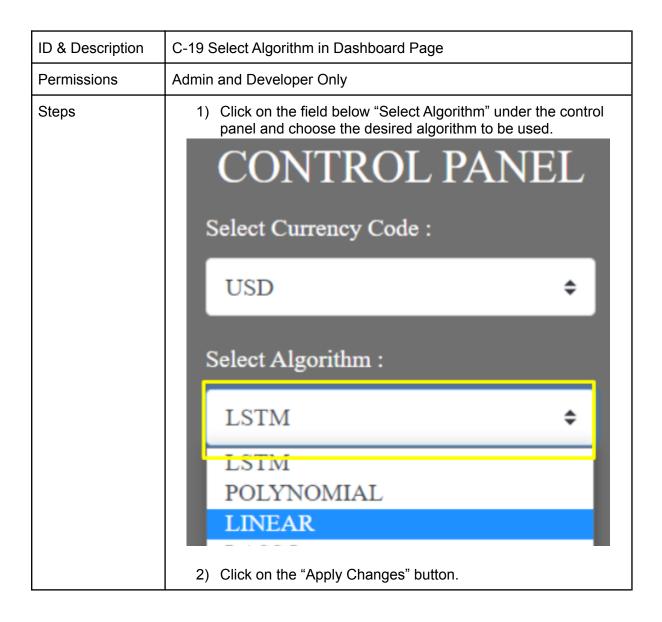


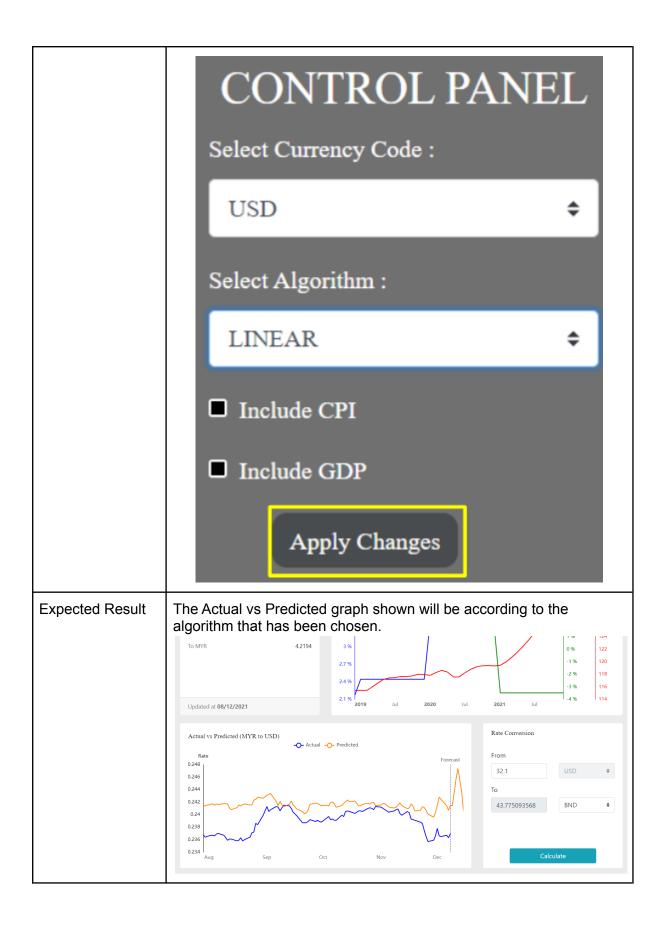


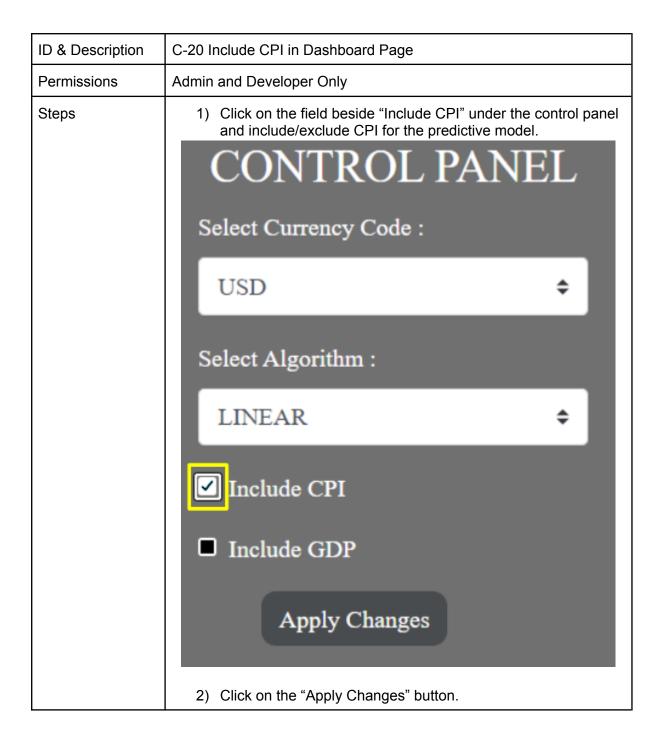
ID & Description	C-18 Select Currency Code in Dashboard Page
Permissions	All Authenticated Users
Steps	Click on the select field below "Select Currency Code" under the control panel and choose the desired currency code.

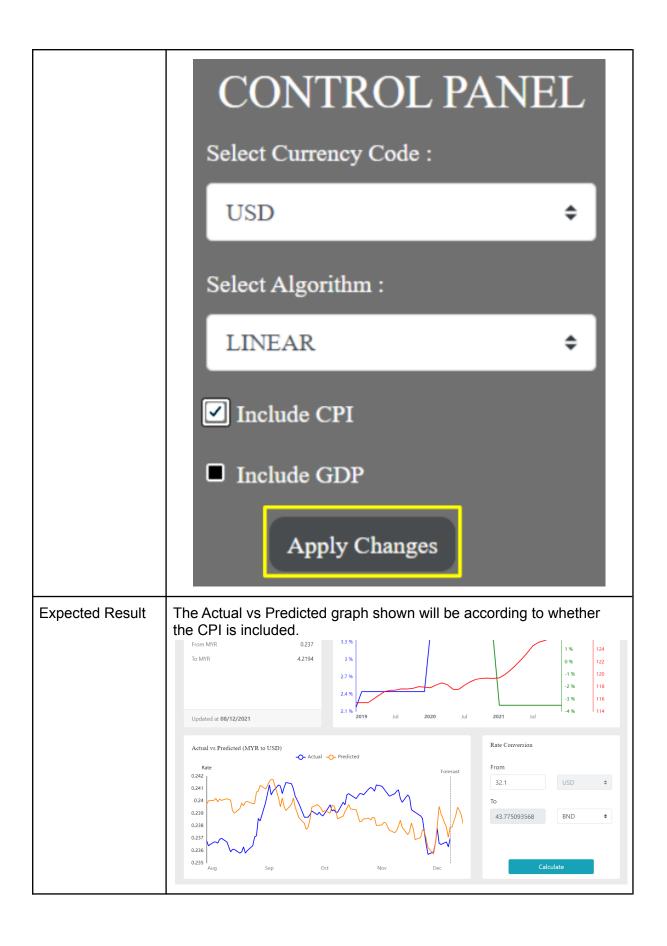


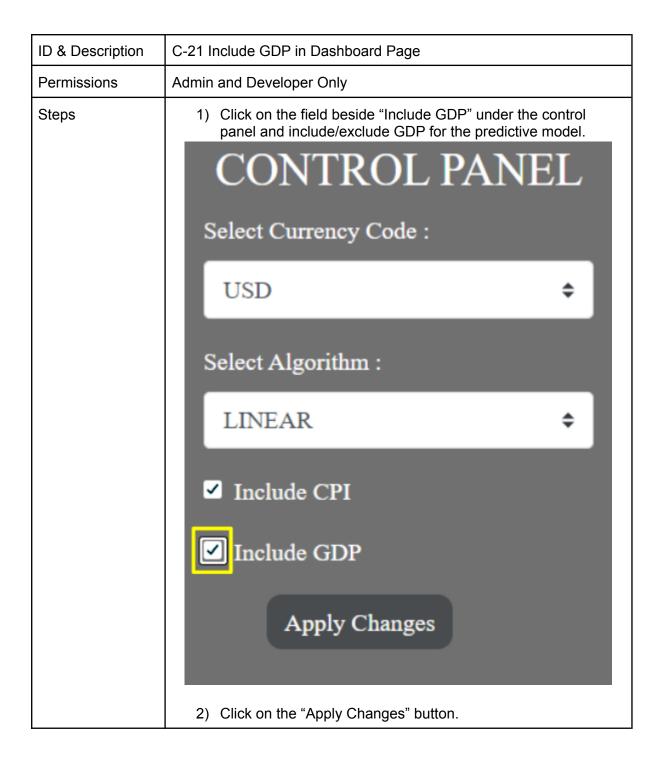


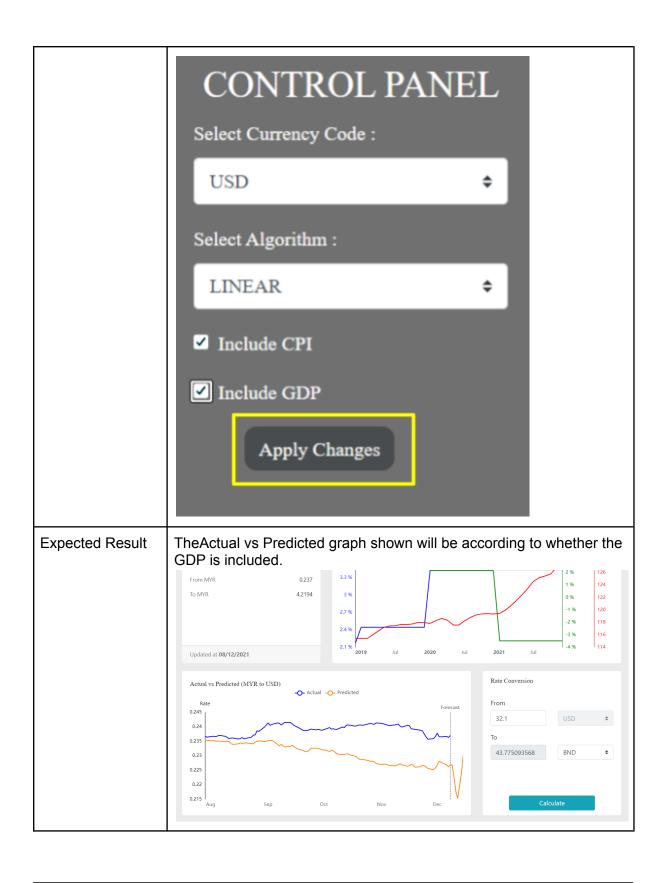




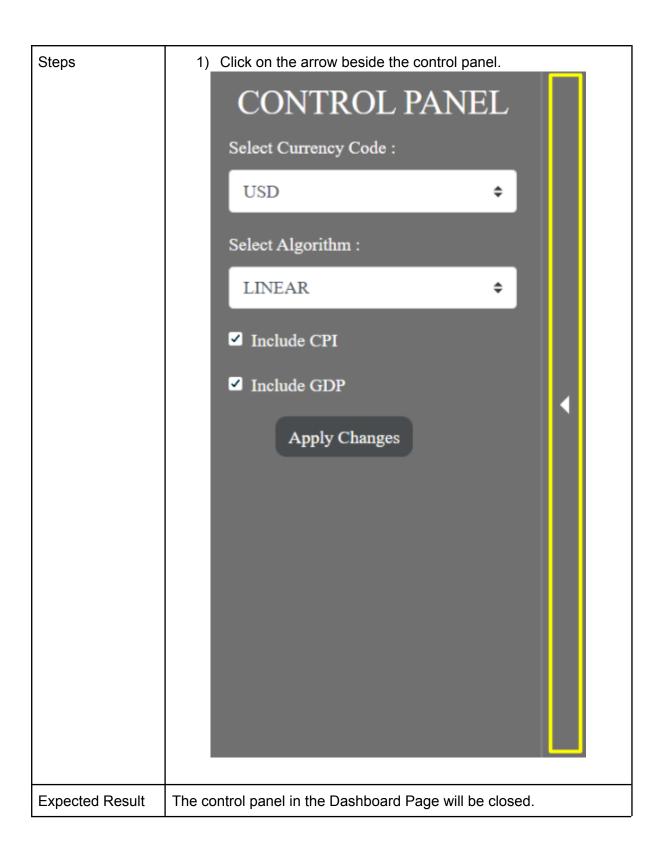




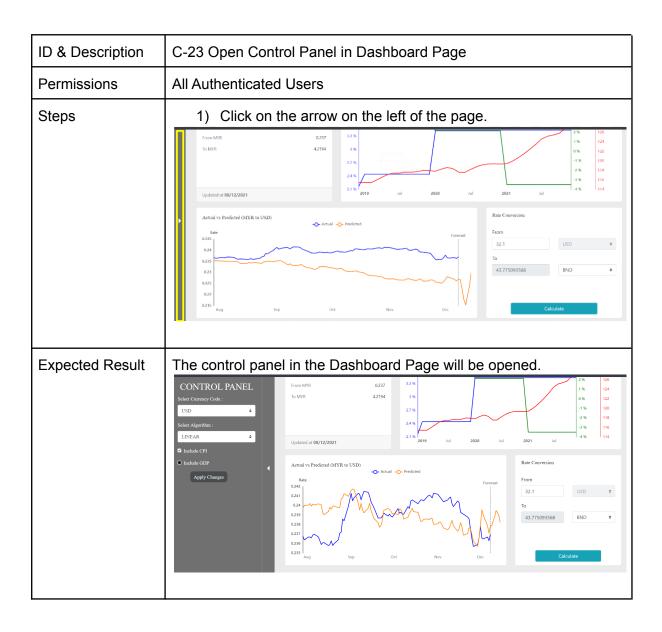




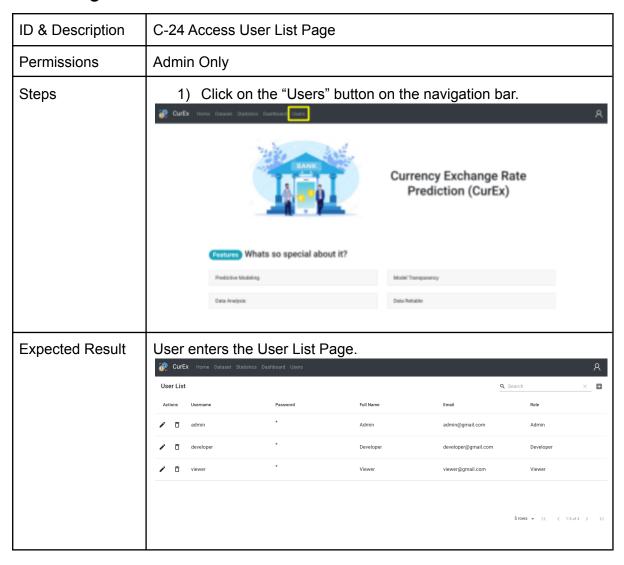
ID & Description	C-22 Close Control Panel in Dashboard Page
Permissions	All Authenticated Users

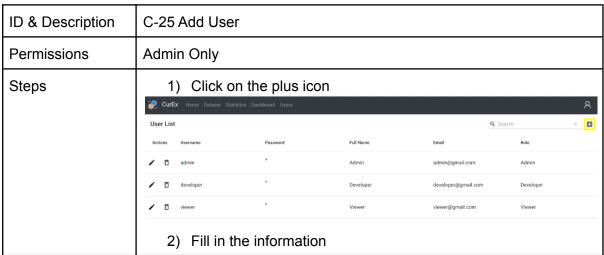


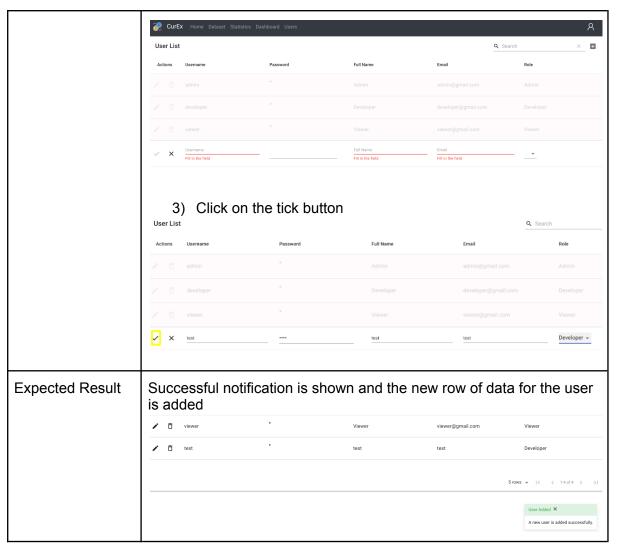


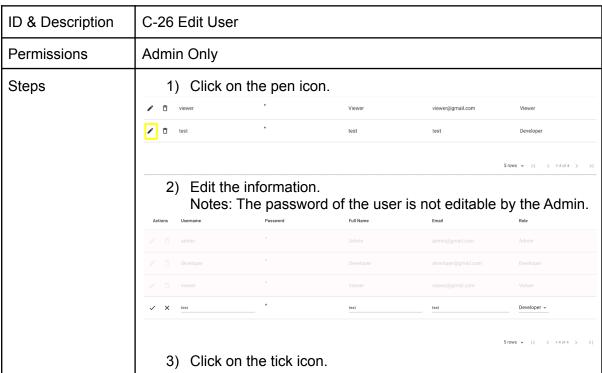


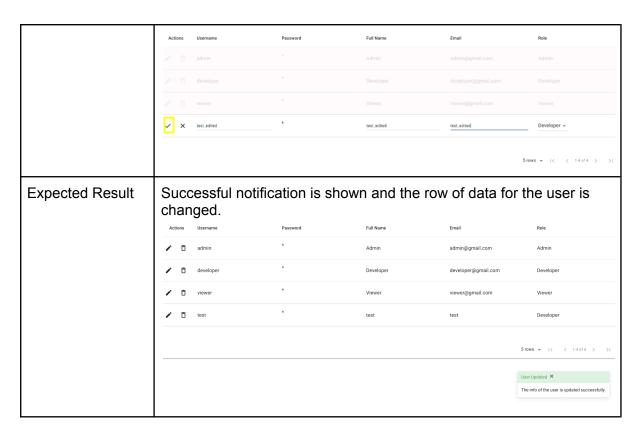
User Page

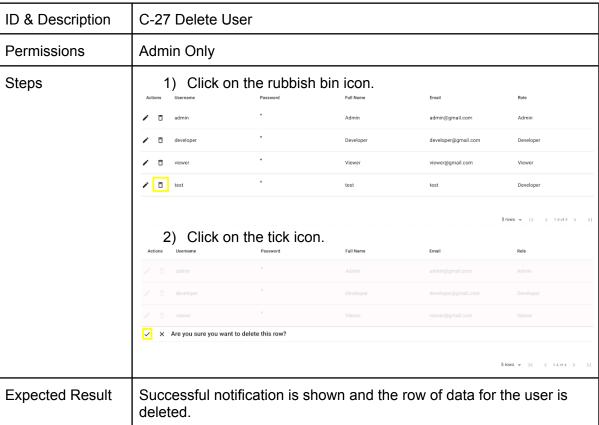


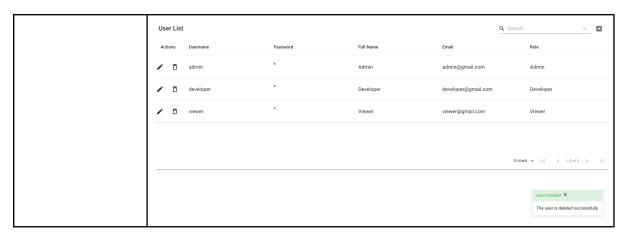


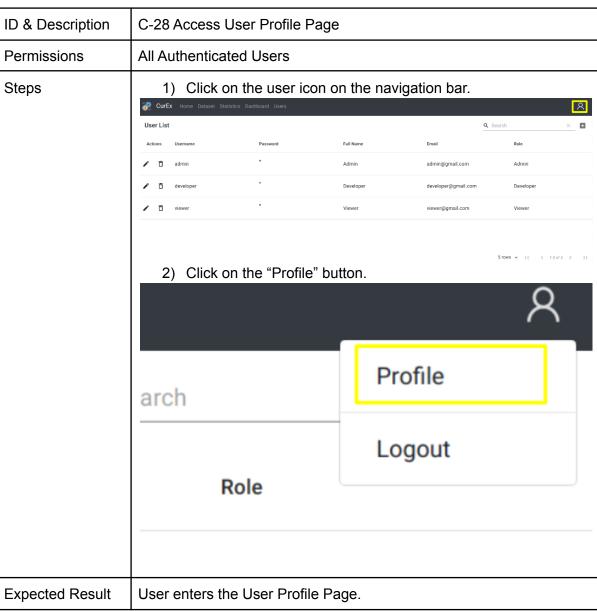


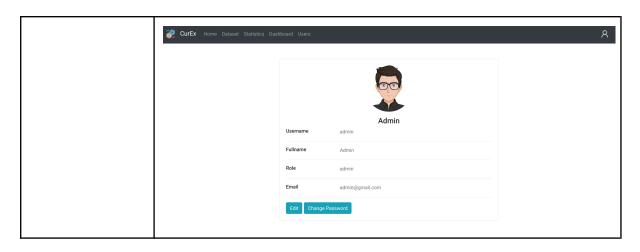


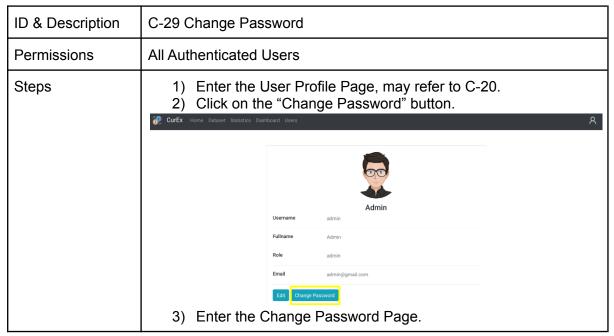












	Change Password
	Old Password
	Enter old password
	New Password
	Enter new password
	Submit
	Fill in the old password and new password. Notes: Make sure the old password is correctly entered.
	Change Password
	Old Password
	New Password
	Submit
	5) Click the "Submit" button.
Expected Result	Successful notification is shown and the password for the user is changed.

