

Table of Contents

Introduction	2
System Requirements	2
End Users Requirements	2
User Guides	2
Overview	2
Event Owner	2
Creates Account	2
Login	2
Logout	3
Create Vote Event	3
View Vote Event	3
View Ongoing Vote Events Page	3
View Completed Vote Events Page	3
Update Vote Event	3
Delete Vote Event	3
Confirm Vote Event	4
View Vote Event's Final Result	4
Publish Vote Event's Final Result	4
Vote Event Status	4
Voter	5
Access The Vote Event Invitation Link	5
Cast and Submit a Vote	5
View Vote Event's Final Result	5
Errors	5
Event Owner Creates Account	6
Event Owner Request OTP Values	6
Event Owner Login	6
Event Owner Creates Vote Event	6
Event Owner Updates Vote Event	7
Event Owner Confirm Vote Event	7
Event Owner View Final Result	7
Voter Access Vote Event Platform	7
Voter Access the Vote Event Final Result	8

Introduction

This document seeks to cover every installation and configuration necessary to support the proposed software system. It guides the interested stakeholders to install our software system and use the service appropriately to avoid any pitfalls or errors.

System Requirements

The user needs to have browsers such as Firefox, Chrome, Safari and Edge installed and network connection to access our web application.

End Users Requirements

Vote Event Creators need to have a valid email address to use our web application and email addresses of participants to take part in the voting. Voters need not use their email to directly access the system but will instead have an invitation link sent to their email to take part in the voting event.

User Guides

Overview

Harpocryption is an e-voting system which employs state of the art encryption schemes to achieve the security on the voting activities over the internet. In the Harpocryption system, there will be mainly two actors interacting with the system, Event Owner and Voter. Event owner initiates a vote event and the voters participate in the vote event by casting the vote options on the system.

This user guide covers all the Harpocryption system features for Event Owner and Voter with detailed procedures. Vote event status and system error messages will also be covered in this document.

Event Owner

Creates Account

1. Access the Harpocryption E-Voting System main page through the address www.harpocryption.com
2. Choose the “Get Started” option from the menu bar and will be redirected to the Event Owner Create Account Page.
3. Fill in the personal particulars on the web form.
4. Request an OTP from the system by clicking the “Get OTP” button.
5. Fill in the OTP values obtained from the email.
6. Click the “Sign Up” button to complete the account creation.

Login

1. Access the Harpocryption E-Voting System main page through the address www.harpocryption.com
2. Choose the “Login” option from the menu bar and will be redirected to the Event Owner Login page.
3. Fill in the login credentials on the web form.
4. Click the “Sign in” button and get redirected into the Homepage if login is successful.

Logout

1. Click the “Logout” button located at the left bottom corner of the page.
2. Get redirected to the Event Owner Login page.

Create Vote Event

1. Click the “Create New Vote Event” button from the vote event list pane in the Homepage.
2. Get redirected to the Create New Vote Event page.
3. Fill in the information for your vote event and upload the participants csv file.
4. You may get an example of the format of the participant csv file format by clicking the link to download the template file.
5. Click the “Confirm” button located at the right bottom of the web form to complete the vote event creation.
6. A pop up acknowledgement message box will be displayed in the Homepage if the creation is successful, otherwise, error messages will be displayed in the vote event creation web form.

View Vote Event

1. In the Homepage, select a vote event you wish to view its information in the event list pane.
2. Click the “View” button in the last column on its respective table row.
3. A vote event information page will be displayed.

View Ongoing Vote Events Page

1. Navigate to the left menu bar pane, click the “Ongoing Vote Events” menu item.
2. A page with only vote events in status of “Pending Confirmation”, “Published” and “Voting Concluded” will be displayed.
3. Select any vote event in the list to perform any operations by clicking the buttons in the last column of the table.

View Completed Vote Events Page

1. Navigate to the left menu bar pane, click the “Completed Vote Events” menu item.
2. A page with only vote events in status of “Final Result Ready” and “Result Published” will be displayed.
3. Select any vote event in the list to perform any operations by clicking the buttons in the last column of the table.

Update Vote Event

1. In the Homepage, select a vote event you wish to view its information in the event list pane.
2. Click the “Modify” button in the last column on its respective table row.
3. An update vote event with a web form filled with the vote event existing information will be displayed.
4. Update the vote event accordingly, confirm the changes by clicking the “Confirm” button located at the right button of the web form.
5. A pop up acknowledgement message box will be displayed in the Homepage if the creation is successful, otherwise, error messages will be displayed in the update vote event web form.

Delete Vote Event

1. In the Homepage, select a vote event you wish to view its information in the event list pane.
2. Click the “Delete” button in the last column on its respective table row.

3. A pop up confirmation box will be displayed. Click “OK” to confirm the deletion, otherwise, click “Cancel”.
4. After the vote event is deleted successfully, the homepage will be refreshed with reflected changes.

Confirm Vote Event

1. In the Homepage, select a vote event you wish to view its information in the event list pane.
2. Click the “Confirm” button in the last column on its respective table row.
3. A pop up confirmation box will be displayed. Click “OK” to confirm the publish, otherwise, click “Cancel”.
4. After the vote event is confirmed and published successfully, the homepage will be refreshed with reflected changes.

View Vote Event’s Final Result

1. In the Homepage, select a vote event in status of “Final Result Ready” or “Result Published” if you wish to view its information in the event list pane.
 - a. Or, you may navigate to the “Completed Vote Events” page to select your vote event.
2. Click the “View” button in the last column on its respective table row.
3. A vote event information page will be displayed.
4. Click the button “View Final Result” located at the bottom of the page.
5. A final result page with the information of the vote event will be displayed.

Publish Vote Event’s Final Result

1. In the Homepage, select a vote event in status of “Final Result Ready” or “Result Published” that you wish to view information about in the event list pane.
 - a. Or, you may navigate to the “Completed Vote Events” page to select your vote event.
2. Click the “View” button in the last column on its respective table row.
3. A vote event information page will be displayed.
4. Click the button “View Final Result” located at the bottom of the page.
5. A final result page with the information of the vote event will be displayed.
6. Click the button “Publish Final Result” located at the bottom of the page.
7. A pop up confirmation box will be displayed. Click “OK” to confirm the publish, otherwise, click “Cancel”.
8. After the vote event’s final result is published, a pop up acknowledgement message will be displayed.

Vote Event Status

The vote event object in the system will go through different status. Each vote event’s status will have their own meanings and some constraints on the operations. This section enumerated the 5 vote event’s status and their descriptions respectively.

Pending Confirmation

This is the status when the vote event is created. Vote Events in this status are not confirmed and allowed to modify any of its attributes. Vote Events in this status will be categorized as “Ongoing Vote Events”.

Published

This is the status when the vote event is published by the event owner. Vote Events in this status are only allowed to modify on end datetime and add more participants to the vote event. Voters will only get access to this status vote event booth. Vote Events in this status will be categorized as “Ongoing Vote Events”.

Voting Concluded

When the vote event end date time has reached, the vote event will transit into this status. Vote Events in this status are no longer accepting any vote casting anymore. Votes tally process will be started in this status. Vote Events in this status will be categorized as “Ongoing Vote Events”.

Confirmation Failed

When the vote event is started after the actual start date time, the vote event will transit into this status. This is because the event has to be confirmed before the actual start date time. Vote Events in this status will be categorized as “Completed Vote Events”.

Final Result Ready

When all the casted votes are tallied and the final results are ready, the vote event will transit into this status. Event Owners are allowed to publish the vote event’s final result in this status. Vote Events in this status will be categorized as “Completed Vote Events”.

Result Published

If the event owner has published the vote event’s final result, the vote event status will eventually fall into this status. Vote Events in this status will be categorized as “Completed Vote Events”.

Voter

Access The Vote Event Invitation Link

1. If you participate in the vote event, you will receive an invitation link in your registered mailbox.
2. Obtain the access link from your email and open it in any modern browser.
3. A voting booth with voting questions and options will be displayed.

Cast and Submit a Vote

1. In the voting booth, select any one of the options from the web form by clicking on them.
2. After confirming the selection, click the “Submit” button.
3. An acknowledgement message will be displayed.

View Vote Event’s Final Result

1. The vote event final result only can be viewed if the event owner has published the result to the participants.
2. If the event owner has published the vote event final result, the access link for the final result will be sent out to the participants through the registered emails.
3. Obtain the access link from your email and open it in any modern browsers.
4. A final result booth with the information of the vote event’s final result will be displayed.

Errors

In some operations, there will be some constraints and restrictions applied to the vote event’s object itself. Error messages will be displayed when the end user violated the defined constraints and restrictions. This section covers all the possible errors that will be displayed when the system fails to process the requests by the end users. The contents in this section will be organized by the requests/operations, such as (Create Account, Login, ..., etc)

Event Owner Creates Account

Error Message	Descriptions
Field Values Invalid !	Field value data type does not match, such as Email Field expected for a valid email syntax and OTP expected for numeric values only.
User Account Already Exists !	When the provided email account is registered with the system.
Passwords Do Not Match !	Password and Retype Password field values are not an exact match.
OTP Value Invalid!	OTP values do not match with the one generated by the system.
Password Format Invalid !	Passwords do not comply with the requirements.
No OTP Generated !	There are no OTP values along with the provided email in the system database.

Event Owner Request OTP Values

Error Message	Descriptions
Invalid Email !	When the provided email address is not valid in conventional email format.

Event Owner Login

Error Message	Descriptions
Incorrect Credentials	Login information does not match the system database records.

Event Owner Creates Vote Event

Error Message	Descriptions
Field Values Invalid !	Field value data type does not match.
Date Time Settings Invalid !	Vote Event Date and Time settings invalid. (Start Datetime after the End Datetime)
At Least Two Vote Options Are Needed !	There must be at least 2 Vote Options.

Event Owner Updates Vote Event

Error Message	Descriptions
Field Values Invalid !	Field value data type does not match.
Date Time Settings Invalid !	Vote Event Date and Time settings invalid. (Start Datetime after the End Datetime)
At Least Two Vote Options Are Needed !	There must be at least 2 Vote Options.
Vote Event Not Modifiable !	When the Vote Event does not meet the criteria for modification. Only the status of PC and PB can be modified.

Event Owner Confirm Vote Event

Error Message	Descriptions
Vote Event Is Already Published !	When the vote event is in status of "Published" (PB) or any proceeding status, there is no way to confirm the vote event again.

Event Owner View Final Result

Error Message	Descriptions
Final Result Is Not Ready !	When the event owner tries to access the vote event in status of "Voting Concluded" (VC).

Voter Access Vote Event Platform

Error Message	Descriptions
Invitation Link Invalid !	When the voter invitation link is not valid, the voter authentication token is mismatched.
Vote Event Has Not Started !	When the vote event is published, but the time of access is before the vote event Start Datetime.
Voter Has Already Voted !	When the voter has been voted for the vote event previously.
Invitation Link Expired !	When the vote event has been concluded, the time of access is after the vote event End Datetime settings.

Voter Access the Vote Event Final Result

<i>Error Message</i>	<i>Descriptions</i>
Access Link Invalid !	When the access final result link is invalid, the voter authentication token is mismatched.

This is the end of the user guide.