User Manual

Berri - Alpha System

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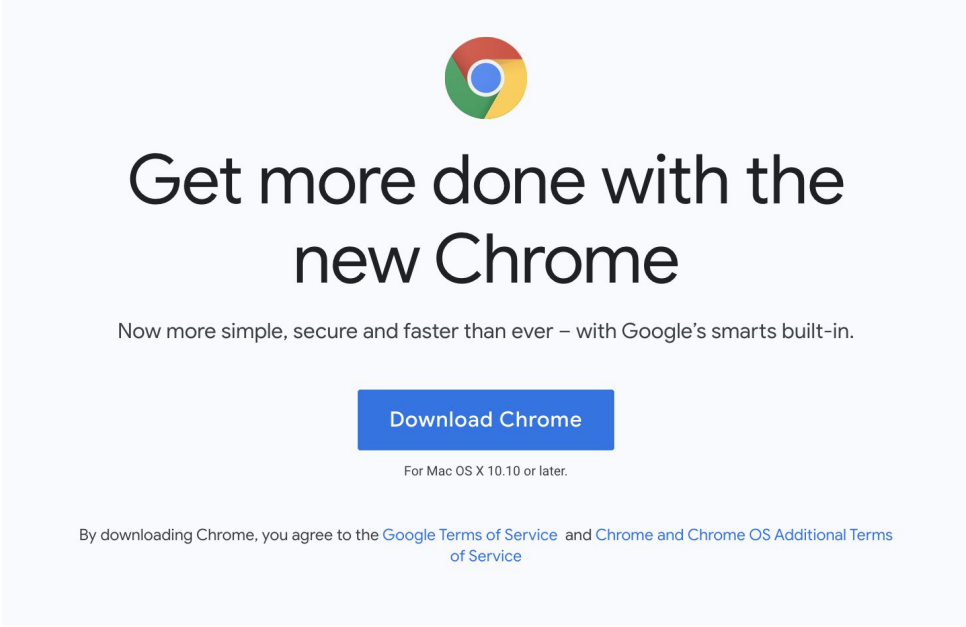
Prerequisite

In order to use our application Berry, you will need to use the Google Chrome browser since the app was developed as a Google Chrome extension.

If you do not already have Google Chrome installed, you can do so by visiting their website at https://www.google.ca/chrome/



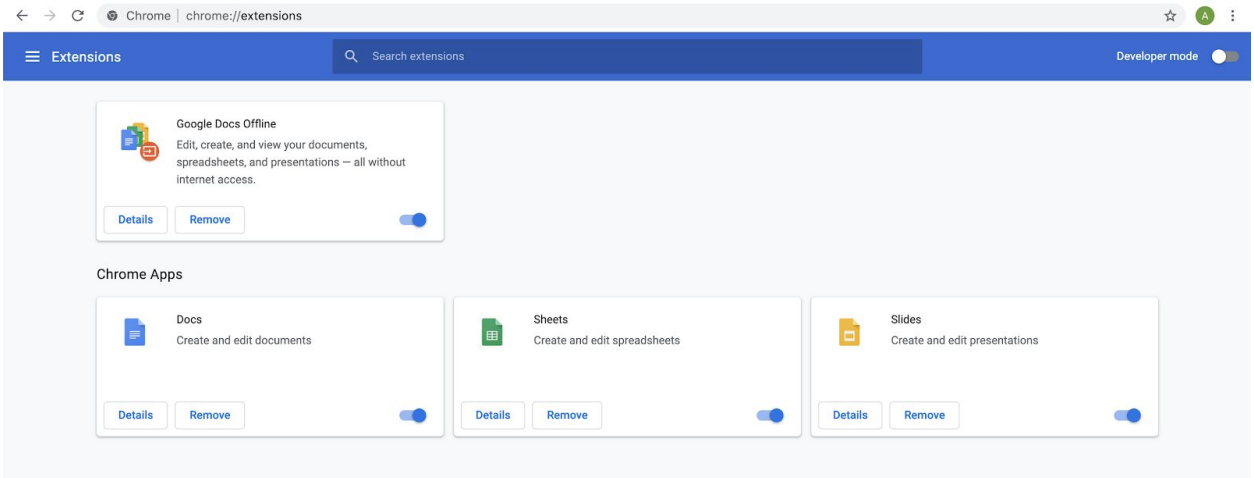
You will be met with the following prompt on the website. Clicking the "Download Chrome" button will download a .dmg or .exe file which contains the Chrome browser. Follow the necessary steps once the file is downloaded, at which point you should have the browser installed.

Also, the app was designed to work with Google Meet. This means that if you wish to use the app, it will only work with Google Meet meetings, not with Zoom. This is because it wasn't possible for our Chrome extension to obtain the chat data from Zoom.

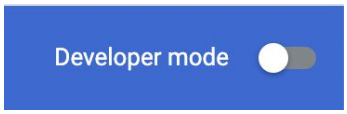
Installation

In order to install our application Berry and get it running, you must first download the application folder from our repository, the link is provided in our website. Once you have downloaded the necessary files, save them somewhere that you can access shortly.

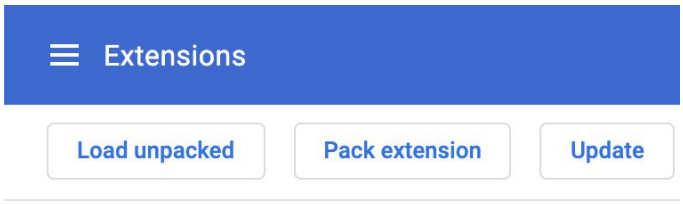
Now, open a Chrome tab, and type chrome://extensions/ into the search bar. You should arrive at a screen that looks similar to this:



From here, you need to toggle the “Developer mode” switch at the top right.



Doing so will add some new options near the top left of the screen, as shown below.



Now, click on the “Load unpacked” button, and search for the application file you downloaded from our website. Select this file, and confirm your selection. This will add our application to your list of extensions. To use the application, click the extensions icon which is right next to the Chrome search bar, and select the Berry app. The icon for the app is shown below:

User Guide

Changes from Computer Prototype

Several changes were made to our app based on the computer prototype version. The details of these changes as well as the reasoning behind them are detailed in the Design Evolution section of the deliverable, but a summary of these changes is as follows:

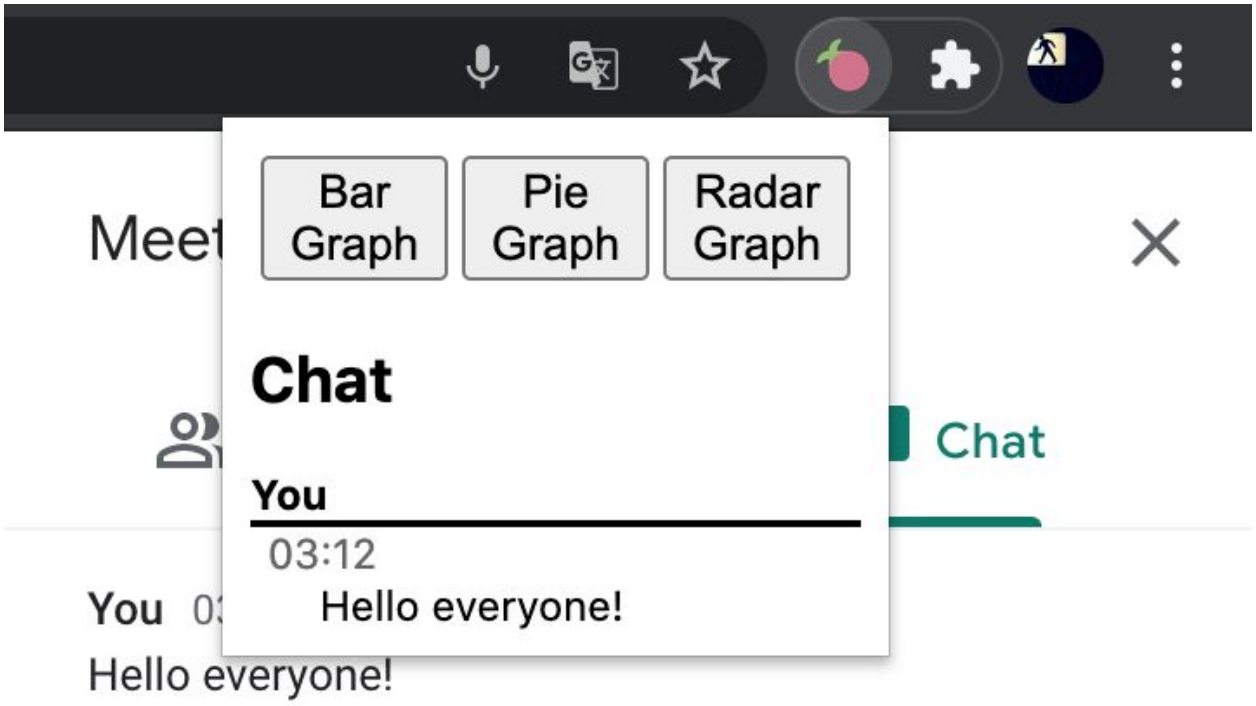
- The app was changed from a Java application to a Chrome extension due to usability concerns. It was noted that not all users would be comfortable with running a Java app from the command line, and that the original design of the app was quite intrusive on the screen and could not be resized. Chrome extensions are much simpler to run and take up much less room on the screen.
- The chat option was removed from the app. Some usability concerns were mentioned for this feature as well, and we figured it would be simpler to have the user chat through the video conferencing software.
- The app now uses Google Meet as its video conferencing software instead of Zoom. Since we are now using a Chrome extension, we were unable to extract that chat data from Zoom to our app. Thus, the change was made to Google Meet.
- The manual record answers and select messages features were both removed, being replaced with more automated versions. Instead of clicking a “record answers” button, the app now just always records the chat when it is open. As for selecting messages, the app groups together similar messages itself.
- Removed the intermediate step of previewing the visualization of the data, as it was found to be unnecessary.

Based on these changes, we arrived at the following design for our application.

Home Page

The home page of our app consists of:

- A chat history region, updating and showing the chat messages from Google Meet simultaneously.
- Three graphing buttons, each of which allows the user to present the data they obtained in a different graphical format. For this version, the options include:
    - Bar Graph
    - Pie Graph
    - Radar Graph



CHAT HISTORY

The chat history region is used to show all the messages received by the host. In Google Meet, the host can be sharing not only their camera or the entire screen, but also a window, or another tab in Chrome. The chat history region in the extension enables the host to see the chat history even when they are not present in the Google Meet tab. For example, they can be sharing a youtube video in another tab in Chrome, while still being able to see the incoming messages.

VISUALIZING ANSWERS

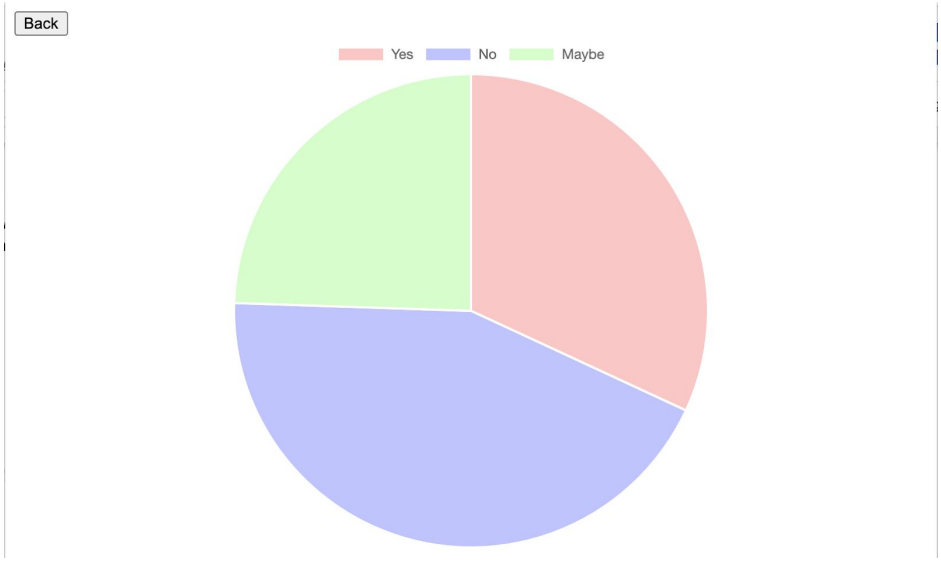
The host can press one of the **Bar Graph**, **Pie Graph**, or **Radar Graph** buttons in order to visualize the answers obtained through the chat. In this current version, the answers that are visualized include any messages that were repeated at least three times in the chat. This is so that any unwanted or unrelated messages that were sent while waiting for valid answers to the question are not included in the visualisation. Note that the method for selecting which data to visualize may change in a future version of the application.

Visualization Pages

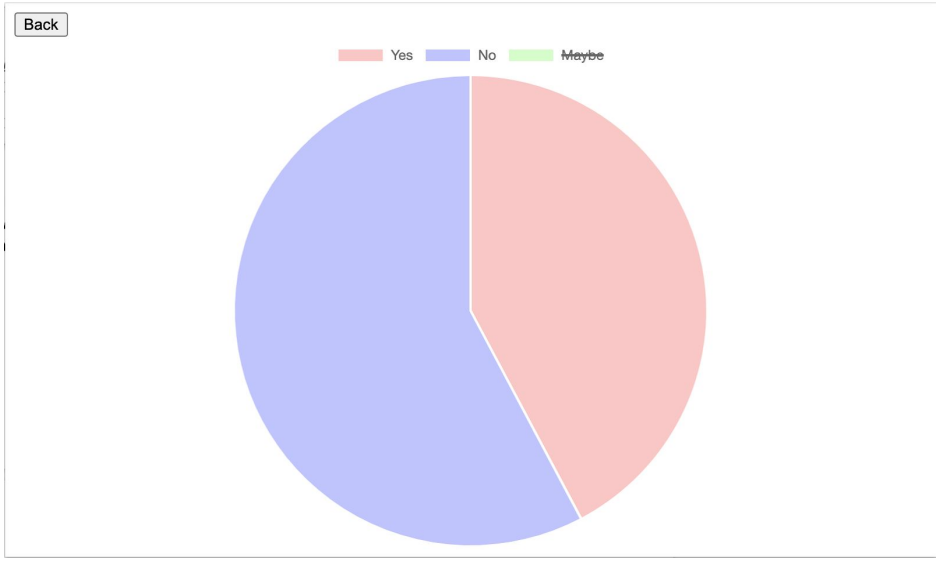
Each visualization page (i.e. the resulting page from each graphing button) consists of a **Back** button in the top right which allows the user to return to the home page, and a visual representation of the answers that were recorded.

EDITING THE GRAPH

The host can edit the graph by choosing which results they would like for it to show. For instance, in the Pie Graph, we first see a visualization as such when we generate it.



However, the host can decide that they do not want to show the “Maybe” answers. To do so, they simply click on the word “Maybe” above the Pie Graph, and this will remove it from the graph. This results in the following Pie Graph.



Known limitations and potential bugs

Here are some limitations that the development team is aware of during testing. If you encounter them during use, please refer to this section to resolve the issue.

‘SYNC’ ERROR

On very few occasions, when the extension started running, a bug of “Uncaught TypeError” was produced. We have tried to reproduce the bug, but it seems like the bug is almost unpredictable. We will for sure keep working on this, and hopefully resolve this issue in our next version. But for now, here is a temporary solution.

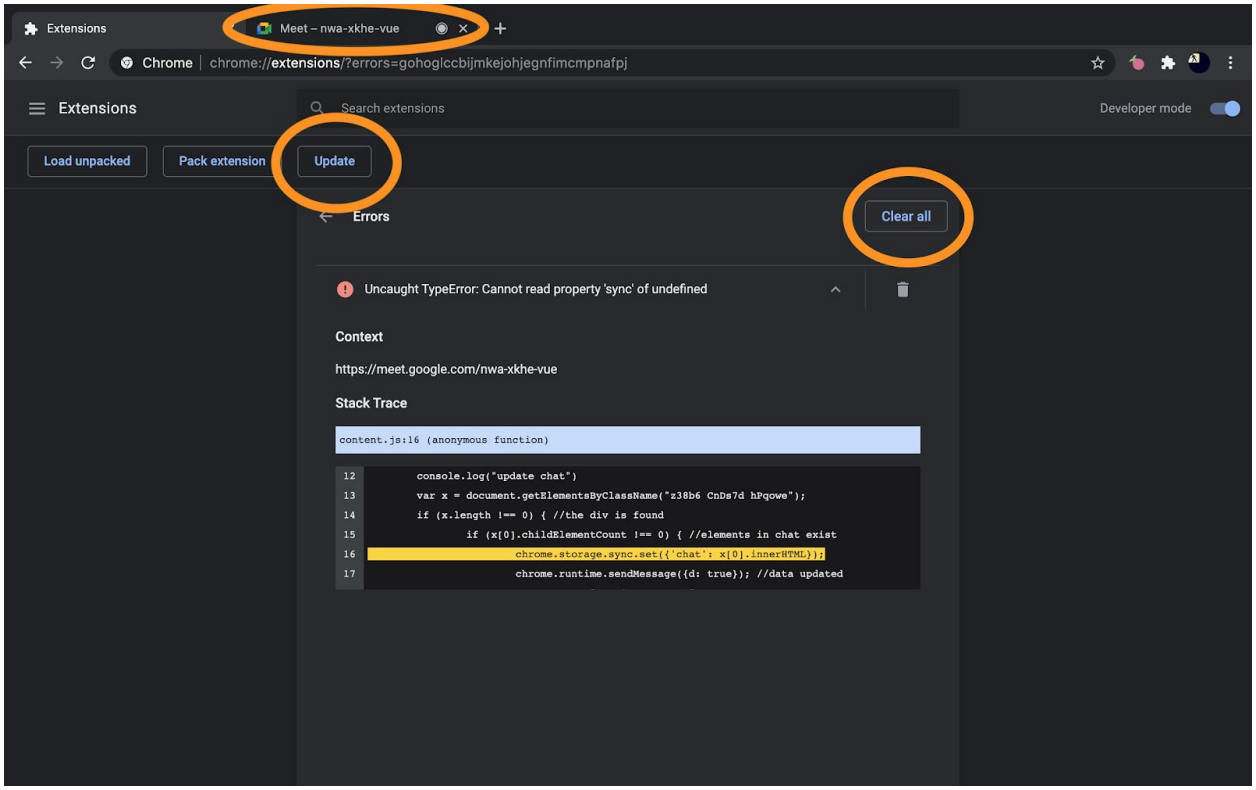
First, close the Google Meet tab. Then, click the “clear all” button. After that, click the “update” button. Finally, open the Google Meet tab button again.

Fortunately, this bug would only appear in the first run after we pushed a new commit. As our users, you can expect 1 fix maximum to resolve to issue forever.

If you are still having problems, please contact us, as we will help you resolve them as best as we can.

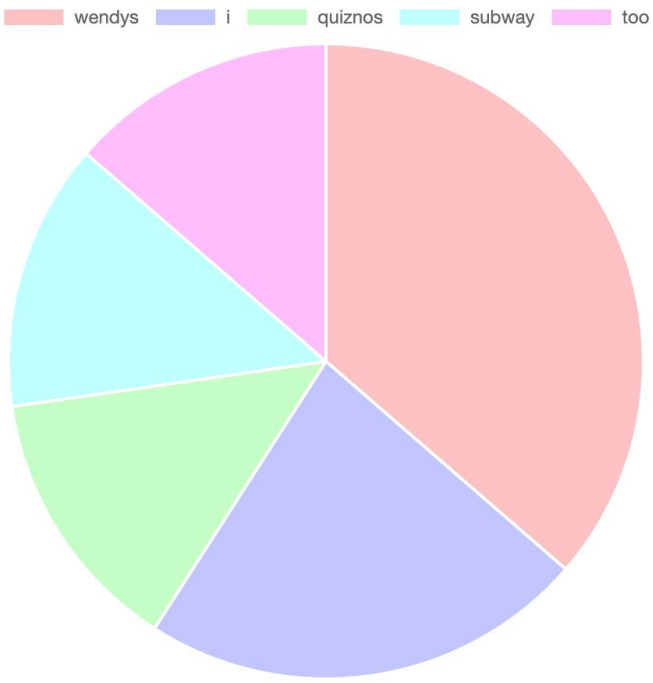
WORD DETECTION

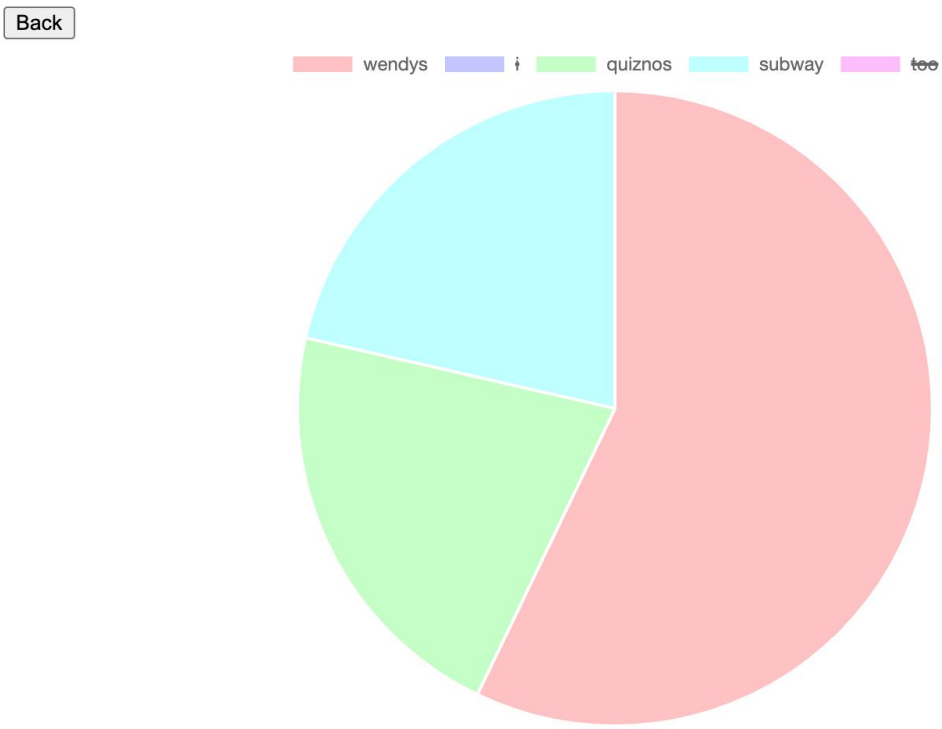
In the alpha system, we are taking every word in the message for consideration. This caused the visualizations always containing words such as “a”, “the”, etc. We will improve our algorithm to select words that only have actual meaning in future versions. If you are unhappy about the result, you can manually deselect them, as described in the “editing the graph” section.



‘Sync’ Error

Back





Before and After Deselecting Words Such as “I” and “too”

LIMITATIONS OF SOME CHARTS

In our current bar chart and radar chart, the labels are not displayed as in pie chart. This is due to the design of Chart.js. We will continue to perfect these charts, so that they behave consistently with the pie chart, or we will replace them with more suitable chart types in the next version.

Thank you so much for using the computer prototype of this Zoom visualization tool. We hope that this user manual addresses all possible curiosities you may have about the system usage.

In case of any subtle discrepancy or inconsistency between the final release of the computer prototype and this user manual, the former shall prevail.

If there is anything not working on your device or environment, please contact us, we are more than happy to look up the issue and offer a solution.

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