# Get all page content for selected team

team\_page <- shiny::reactive({

shiny::req(input$team != " ")

url <- paste0(input$team)

httr2::request(url) |>

httr2::req\_perform() |>

httr2::resp\_body\_html()

})

# Get all page content for selected cheerleader

cheerleader\_page <- shiny::reactive({

shiny::req(input$cheerleader != " ")

url <- paste0(wiki\_url, input$cheerleader)

httr2::request(url) |>

httr2::req\_perform() |>

httr2::resp\_body\_html()

})

cheerleader\_page() is the xml\_nodes object for the entire cheerleader page

we can get hyperlinks, images

page <- httr2::request(url) |>

httr2::req\_perform() |>

httr2::resp\_body\_html()

To get the index of the table, we use rvest::html\_table to return the xml nodes tables as data.frame data. Then search for a value that only appears in the table we want and return the index to subset the xml\_nodes table list.

xml\_tables <- rvest::html\_nodes(page, "table")

df\_tables <- lapply(xml\_tables, rvest::html\_table, fill = TRUE)

keyword <- “unique word found in the table”

for (i in seq\_along(tables)) {

table <- tables[[i]]

if (any(!is.na(table$X1))) {

if (any(table$X1 == keyword)) {

return(i) # return the index of the cheerleader table

}

}

}

bio\_table <- xml\_tables[[index]]

We have the page data for both operations

getCheerleaderPhoto(page)

getCheerleaderBio(page)

We don’t need df\_tables for the cheerleader photo, only xml nodes, but we need df\_tables to get the index of the cheerleader table.

Pages can be reactiveVals() that stores both the xml\_tables and df\_tables object and further refines to the table we actually require for the specified cheerleader biography page.

# Get all page content for selected cheerleader

cheerleader\_page <- shiny::reactive({

shiny::req(input$cheerleader != " ")

url <- paste0(wiki\_url, input$cheerleader)

page <- httr2::request(url) |>

httr2::req\_perform() |>

httr2::resp\_body\_html()

xml\_tables <- rvest::html\_nodes(page, "table")

df\_tables <- lapply(xml\_tables, rvest::html\_table, fill = TRUE)

index <- bioTableIndex(df\_tables, "nationality")

bio\_table <- xml\_tables[[index]]

list(

bio\_table = bio\_table,

df\_tables = df\_tables

)

})

TEAM MEMBER COUNT AVERAGE TENURE SOCIAL MEDIA VIEWS

**YouTube Data API v3**

|  |  |
| --- | --- |
| https://www.googleapis.com/auth/youtube | Manage your YouTube account |
| https://www.googleapis.com/auth/youtube.channel-memberships.creator | See a list of your current active channel members, their current level, and when they became a member |
| https://www.googleapis.com/auth/youtube.force-ssl | See, edit, and permanently delete your YouTube videos, ratings, comments and captions |
| https://www.googleapis.com/auth/youtube.readonly | View your YouTube account |
| https://www.googleapis.com/auth/youtube.upload | Manage your YouTube videos |
| https://www.googleapis.com/auth/youtubepartner | View and manage your assets and associated content on YouTube |
| https://www.googleapis.com/auth/youtubepartner-channel-audit | View private information of your YouTube channel relevant during the audit process with a YouTube partner |

**YouTube Analytics API**

|  |  |
| --- | --- |
| https://www.googleapis.com/auth/youtube | Manage your YouTube account |
| https://www.googleapis.com/auth/youtube.readonly | View your YouTube account |
| https://www.googleapis.com/auth/youtubepartner | View and manage your assets and associated content on YouTube |
| https://www.googleapis.com/auth/yt-analytics-monetary.readonly | View monetary and non-monetary YouTube Analytics reports for your YouTube content |
| https://www.googleapis.com/auth/yt-analytics.readonly | View YouTube Analytics reports for your YouTube content |

**YouTube Reporting API**

|  |  |
| --- | --- |
| https://www.googleapis.com/auth/yt-analytics-monetary.readonly | View monetary and non-monetary YouTube Analytics reports for your YouTube content |
| https://www.googleapis.com/auth/yt-analytics.readonly | View YouTube Analytics reports for your YouTube content |

~~YouTube Ads Reach API~~

~~Freebase API~~

**VOSON SML**

1. Authenticate
2. Collect
3. Create

Verbose = TRUE

WriteToFile = TRUE saves RDS

Voson.data path

Voson.cat TRUE – verbose output printed

Authentication objects created once unless credentials change

Save YouTube authentication objects to file and load them in future sessions

Only does comments

**YTAnalytics**

YTAnalytics::youtube\_oauth(clientId = Sys.getenv("YT\_CLIENT\_ID"),

clientSecret = Sys.getenv("YT\_CLIENT\_SECRET"))

**instaR**

basic/ public content

**tuber::**

Your Shiny app sounds exciting and well thought out! Here are some interesting metrics and visualizations you can include in the main tab panel when the user enters the application:

### 1. \*\*Overall Social Media Presence\*\*

- \*\*Total Followers Across Platforms\*\*: Display the combined total of all followers across Instagram, TikTok, and YouTube for the selected team. This can give an overall impression of the team's social media reach.

- \*\*Average Followers per Cheerleader\*\*: Show the average number of followers across all platforms per cheerleader. You can break this down by platform to show which platform the team is most popular on.

### 2. \*\*Platform Popularity\*\*

- \*\*Platform Distribution\*\*: Create a pie chart or bar graph showing the percentage of total followers on each platform (Instagram, TikTok, YouTube) for the team. This can highlight which platform the team or its cheerleaders are most engaged on.

- \*\*Follower Growth Rate\*\*: If you have time-series data, plot the follower growth rate on each platform over time for the team or individual cheerleaders.

### 3. \*\*Engagement Metrics\*\*

- \*\*Engagement Ratio\*\*: For each platform, calculate and display the engagement ratio (e.g., likes/views per follower on Instagram or YouTube). This can be a key metric to show how engaged the audience is with the content.

- \*\*Top-Performing Cheerleaders\*\*: Highlight the cheerleaders with the highest engagement rates on each platform. This can be a leaderboard style metric.

### 4. \*\*Team-Level Insights\*\*

- \*\*Most Followed Cheerleader\*\*: Display the cheerleader with the highest number of followers across all platforms or on a specific platform.

- \*\*Team Social Media Leaderboard\*\*: A table or bar chart ranking cheerleaders by total followers or engagement metrics across platforms.

- \*\*Cheerleader Consistency\*\*: Highlight cheerleaders who have a strong presence on all platforms (high follower counts and engagement on Instagram, TikTok, and YouTube).

### 5. \*\*Content Metrics\*\*

- \*\*YouTube Content Metrics\*\*: Display the total number of videos and cumulative views for the team or each cheerleader’s YouTube channel.

- \*\*Video Performance\*\*: If available, show the average views per video on YouTube for each cheerleader, helping to gauge the effectiveness of their content.

### 6. \*\*Visual Comparisons\*\*

- \*\*Follower Heatmap\*\*: A heatmap showing the distribution of followers across different cheerleaders and platforms, providing a quick visual representation of social media dominance.

- \*\*Trend Lines\*\*: If you have historical data, plot trend lines for follower growth on each platform to show how each cheerleader or the entire team has grown over time.

### 7. \*\*Demographic Insights\*\*

- \*\*Audience Demographics (if available)\*\*: If you have access to audience demographics (e.g., age, gender, location), you could create visualizations that show which demographics are most engaged with each cheerleader or the team.

### 8. \*\*Team vs. League Comparison\*\*

- \*\*League Comparison\*\*: Compare the selected team's social media metrics against the average or top-performing teams in the league. This can give users a sense of how the team stacks up in terms of social media presence.

### 9. \*\*Time-Based Metrics\*\*

- \*\*Daily/Weekly/Monthly Trends\*\*: If you have temporal data, show trends for new followers, likes, or views over time. You could also display key events (like a new video release) and their impact on metrics.

### 10. \*\*Custom Insights\*\*

- \*\*Content Impact Analysis\*\*: If you have data on specific posts or videos, you could analyze which types of content lead to the highest engagement or follower growth.

- \*\*Cross-Platform Influence\*\*: Show the correlation between growth on one platform and growth on another (e.g., does a strong Instagram presence lead to more YouTube subscribers?).

These metrics and visualizations should provide users with a comprehensive overview of the team's and individual cheerleaders' social media impact while also highlighting key areas of interest that might engage them further.