Kampala Dashboard

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Instructions for Using the Kampala R Shiny Dashboard Script

Below is a step-by-step guide to install and run the R Shiny dashboard on a local desktop and on an R Shiny Server.

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1. Running the R Shiny Script on Desktop (Local Machine)

Step 1: Install R and RStudio

1. **Install R**: Download and install R from CRAN.
2. **Install RStudio**: Download and install RStudio from here.

Step 2: Install Required Packages

1. Open RStudio.
2. Install the necessary R packages by running the following commands in the RStudio console:

```
install.packages(c("shiny", "shinydashboard", "leaflet", "plotly", "tidyverse", "DT", "RColorBrewer
```

Step 3: Set Up Your Project

1. Download the R Shiny script (`app.R`) and place it in a dedicated project folder on your local machine.
2. Ensure that the `Kampala_data.csv` file is in the same folder as the `Kampala_dashboard.R` script.

Step 4: Run the App

1. Open the `app.R` script in RStudio.
2. In the top-right corner of the script, click the **Run App** button, or run the following command in the RStudio console:

```
shiny::runApp("path_to_your_project_folder")
```

3. The dashboard will launch in your default web browser. You can interact with the visualizations and download data as specified.

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2. Running the R Shiny Script on an R Shiny Server

Step 1: Install R and Shiny Server

1. **Install R**: Follow the instructions for installing R as described above.
2. **Install Shiny Server**:
   - For **Debian/Ubuntu**:

```
sudo apt-get install r-base
sudo apt-get install gdebi-core
wget https://download3.rstudio.org/ubuntu-14.04/x86_64/shiny-server-1.5.16.958-amd64.deb
sudo gdebi shiny-server-1.5.16.958-amd64.deb
```

   - For **Red Hat/CentOS**:

```
sudo yum install R
sudo yum install epel-release
sudo yum install gdebi-core
wget https://download3.rstudio.org/centos7.4/x86_64/shiny-server-1.5.16.958-rh5-x86_64.rpm
sudo yum install shiny-server-1.5.16.958-rh5-x86_64.rpm
```

Step 2: Install R Packages on the Server

1. Connect to your server via SSH.
2. Open an R session on the server and install the necessary R packages:

```
install.packages(c("shiny", "shinydashboard", "leaflet", "plotly", "tidyverse", "DT", "RColorBrewer
```

Step 3: Deploy the App to Shiny Server

1. **Upload the Files**:
   - Place your `app.R` file and the `Kamapala_data.csv` file in a directory on the server (e.g., `/srv/shiny-server/AMR_Dashboard`).
2. **Set File Permissions**:
   - Ensure the Shiny app directory has the correct file permissions. Typically, this can be done with:

```
sudo chown -R shiny:shiny /srv/shiny-server/AMR_Dashboard
sudo chmod -R 755 /srv/shiny-server/AMR_Dashboard
```

3. **Restart Shiny Server**:
   - Restart the Shiny server to load the new application:

```
sudo systemctl restart shiny-server
```

Step 4: Access the Application

1. Navigate to the server's IP address or domain, followed by the directory where your app is stored. For example:

   `http://your-server-ip:3838/AMR_Dashboard`

2. The dashboard will launch in your browser, similar to running it locally. Interact with the visualizations and download data as needed.

Troubleshooting

- **Ensure file paths are correct**: If you face any issues with file paths, verify that `Kamapal_data.csv` is in the correct directory relative to the `app.R` script.
- **Check server logs**: On Shiny Server, check the logs at `/var/log/shiny-server/` for detailed error messages.
- **Installing packages for Shiny Server**: It advisable to install all packages through R console. Sometimes packages installed through RStudio do not work on the Shiny server.

Now you're ready