

Coding Guidelines Report

Code to be Analyzed:

```
## 4. Plot for Distance Analysis by Piece
output$distancePlot2 <- renderPlotly({
  req(inFile())

  plot_ly(
    data = inFile(),
    type = "scatter3d",
    mode = "markers",
    x = ~ distance,
    y = ~ completion_time,
    z = ~ piece,
    color = ~ piece,
    marker = list(size = 3),
    text = ~ playerID
  )
})

## 5. Plot for Distance Analysis by Player
output$distancePlot1 <- renderPlotly({
  req(inFile())

  plot_ly(
    data = inFile(),
    type = "scatter3d",
    mode = "markers",
    x = ~ distance,
    y = ~ completion_time,
    z = ~ playerID,
    color = ~ playerID,
    marker = list(size = 3),
    text = ~ piece
  )
})

## 6. Plot for the heatmap
output$heatmapPlot <- renderPlotly({
  heatmap <- ggplot(inFile(), aes(x = X, y = Y, fill = ..density..)) +
    geom_bin2d(bins = 30) +
    scale_fill_viridis_c() +
    labs(title = "2D Heatmap of Player Positions", x = "X Coordinate", y = "Y Coordinate")
})
```

Report:

Functions, Methods, and Size:	These functions are small and perform a singular action. They each create a singular visualization.
Formatting, layout, and style:	Each function follows the same layout. The plotly layouts are the same and consistent in architecture. Length is below 100 chars.
White Space:	This follows the right white space rules. There is space separating the functions, formatting styles are followed, and minimal irrelevant white spaces. Space between plotly and reqinfile should be deleted.
Block and Statement style guidelines:	Block statements formats are correctly styled. Parenthesis are used adequately. No conditionals are present.
Declaration Style Guidelines	infile for req(infile) is not declared closely, however it is used in most functions therefore is acceptable. Otherwise satisfactory.
Commenting Style Guidelines:	Proper spacing is used correctly. Comments are simple but describe the purpose of the function and its output visualization.
Identifier naming conventions:	Identifier naming conventions are adequate, but do not perfectly follow the verb-noun pairing. Camel case is used correctly. Names are comprehensible.
Defensive programming: Questions:	Not applicable to this code block.
Error Handling:	Not applicable to this code block.