Human Stress Detection in and through Sleep

Team Maximus

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Library Installations

Explanation of Data source

our https://www.kaggle.com/datasets/andrewmvd/board-games?resource=download

Initial Observations

One initial thing to note about our data is that a minority of participants were ranked as having a hours slept value of 0.
We decided that we would separate these participants into a separate data set because we were unsure how to interpret
this value and we were worried it would influence the rest of the data.

```
##  [1] "ï..ID"            "Name"               "Year.Published"
##  [4] "Min.Players"      "Max.Players"        "Play.Time"
##  [7] "Min.Age"          "Users.Rated"        "Rating.Average"
## [10] "BGG.Rank"         "Complexity.Average" "Owned.Users"
## [13] "Mechanics"        "Domains"
```

Table 1: Table continues below

ï..ID	Name	Year.Published	Min.Players	Max.Players

Table 2: Table continues below

Play.Time	Min.Age	Users.Rated	Rating.Average

Table 3: Table continues below

BGG.Rank	Complexity.Average	Owned.Users	Mechanics

the variables of note are
* stress levels
if we are able to predict stress levels it might be possible to reduce people's stress levels by modifying some of the other factors.
* Blood oxygen,Heart Rate, respiration rate, Body Temperature
these variables are grouped together because they are the ones that stand out as the most medically relevant. Being able to predict them is likely to be useful to medical professionals.

We created box plots to show each of these variables for both the group where sleep is 0 and for the main group

What we want to do with the data

Citations

Dilini Samarasinghe, July 5, 2021, "BoardGameGeek Dataset on Board Games", IEEE Dataport, doi: https://dx.doi.org/10.21227/9g61-bs59.