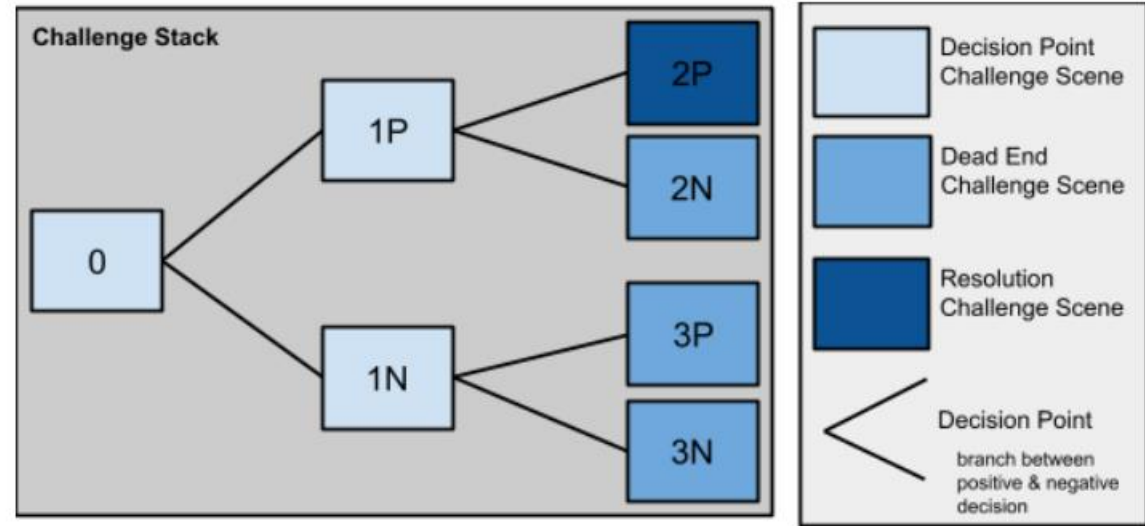
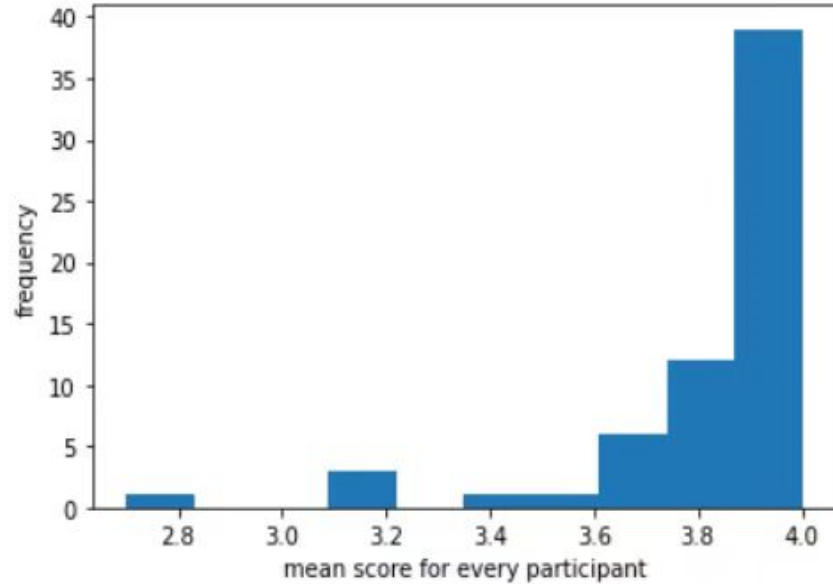


Score System By Reward and Punishment

Team Stack Underflow

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Background: Researchers usually have to rely on questionnaires to try to predict future behaviors. But people are not always the most reliable reporters of their own beliefs and actions, particularly young people.



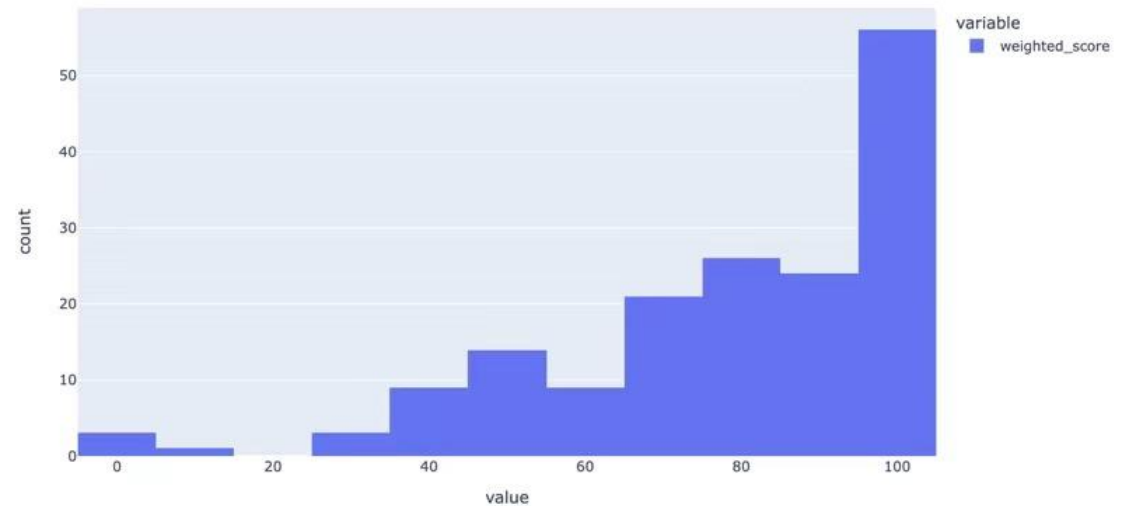
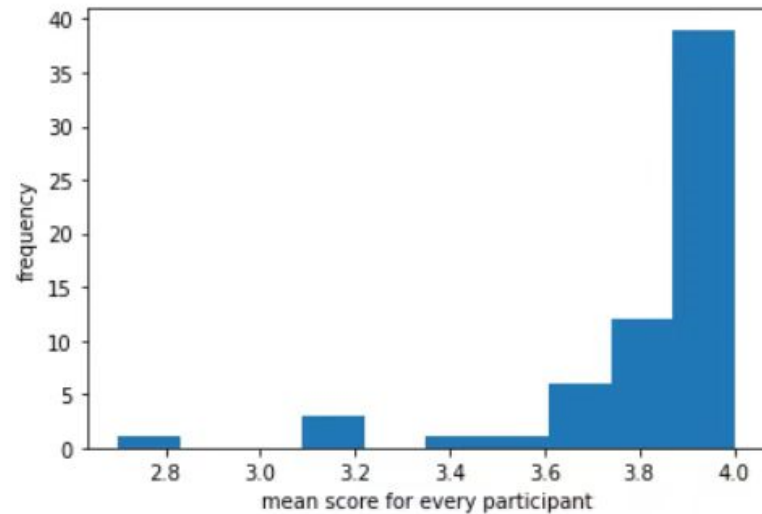
Methods to improve the scoring system: We selected all data_values in which their event_id is 216 from the file “logs.csv file “. We are interested in the data_values corresponding to event_id = 216 (“Player triggers Stack Animatic”), which indicate whether **the final decision of that participant selecting is positive or negative (containing the real decisions of students)**. We create a new score system based on the idea of reward and punishment.

The formula we create is :

$$S(x) = \sum_{i=1}^{12} (\text{weight of each scenario} * \frac{\text{nodes in each scenario}}{\text{steps participant taking}})$$

Results: The scores we got based on our new scoring system is less left-skewed.

We can see there more students get higher score, but also a lot of students are “not so high” comparing to the original score system.



Conclusion: The guess we proposed that the questionnaire is not reliable enough to predicate the future behaviors and some people are not honest when doing the questionnaire has been proved. Our scoring system can be one way to improve the accuracy of the predication.