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| NAME | VARIABLE | DESCRIPTION | JUSTIFICATION | MEASURE |
| Development Tool | D | The tool the developer uses to write/develop the software. | If the developer has a terrible tool his/her work cannot be the best | Rating of different development tools |
| Experience | Ex | The amount of time, in years, the developer has in writing software. | The less experience a developer has the more error prone their code is | Years, starting at when they started coding full time |
| Motivation | M | How motivated the developers are in developing the software. | An unmotivated developer has no reason to continue producing quality code | A scale of 1-10 of how motivated the developers are to work on a project |
| Programming Language | PL | The language the software is being written in. | Some languages are easier or harder to work with | Rating different programming languages |
| Team Size | TS | How big of a team is developing the software. | You need the right size of a team to be most effective | Have team sizes with a rating |
| Training | T | How much training is provided for the developers. | Training is key to help your company’s developers produce quality code in a timely manner | How often developers are trained at a given company |
| Work Environment | WE | The environment the developers have to work in. | A terrible environment makes it hard to work and can be very distracting | How the developers rate the environment they work in |
| Code Reuse | CR | How often previously written code is used again. | Reusing code saves time which allows you to truly focus on the more complex items | How often developers reuse code |

**Grouping**

Environment Weight=0.3 ENV

Development tool, Work Environment,

Company Weight=0.5 COM

Code reuse, Training, Team size, Programming Language

Developer Weight=0.2 DEV

Experience, Motivation

**Model**

Total = .3ENV + .5COM + .2DEV

ENV = .4DT + .6WE

COM = .4CR + .4T + .3TS + .1PL

DEV = .5Ex \* .6M

I feel this would be a decent model because it takes into account the things I feel are important, being listed as factors. They are each weighted as to show which is more important. I split them into groups and gave each group a weight to make it easier. Using the individual factors, I calculate the value for each group, then using these groups I calculate the final total of productivity.