Abstract

It’s commonly said that doing physical activity after a long period of working can help to clear the mind thus helping it to focus and perform better.

This dissertation aims to develop tools to aid researchers in investigating whether or not this hypothesis is true, specifically focusing on if physical activity has any influence on software engineering performance.

Two tools were developed for this dissertation. The first is a mobile phone application which uses built-in device sensors to track the user’s movement and uploads the data to a database. The second tool is a web server and dashboard that pulls metrics to measure software engineering performance from the user’s Github profile and compares them with the user’s movement data.

An experiment was run on the author to gather their movement data and software engineering performance data over a short time period.

Overall the tools succeeded in collecting the required data to compare the physical activity and software engineering activity of a user. No correlation was found between the two over the period of the short experiment.

The outcome of this dissertation is that researchers in the future could use the tools created by this dissertation to run more experiments to perform a more accurate investigation into the hypothesis proposed above.