MEMORANDUM

DATE: Thursday, 24th September 2020

TO: Manager's manager

FROM: Atharva Shukla, Dhruvi Bakeri

SUBJECT: Evaluation of the language used in exploratory programming tasks

We used TypeScript — a strict syntactical superset of JavaScript — for the exploratory programming tasks B to E. Our assessment:

— **Untyped to Typed migration**: Fast prototyping with JavaScript and then hardening the code by adding types has been productive for us.

— **Libraries and Tooling**: Javascript, being the language of the web, has a host of tooling and libraries around it. It is important to note that the packages are often bloated, and it is hard to choose the "right one" from the abundance.

— **Paradigm flexible**: Allowed us to write code in functional, object-oriented, or reactive style based on the needs of the project.

— **Leveraging existing infrastructure**: Web APIs (like Canvas) are well documented and are easy to get guidance for. With JavaScript, we get these for free.

— **Configuration**: Configuring the environment can be tedious, this includes specifying the package manager config, setting various compiler flags, adding testing libraries and linting tools.