Interaction Analysis Essay 4

For today's analysis, which was to analyze the gamification of something I'm currently working on with the GEM (Gamer Experience Model), I chose the Jupyter lab environment. I'm using a jupyter notebook (the artefact created by the Jupyter lab CLI tool) to create an image recognition algorithm, as part of the Machine Learning and Pattern Recognition course. The main components of the GEM are aesthetics, fantasy and mechanics. Aesthetics is created by sensory stimulus, fantasy with different narratives and the mechanics of the system are what make action possible.

The aesthetics of the Jupyter notebook are bare and mostly colorless. The thematic or "brand" color of Jupyter is orange, but the UI itself is mostly black and white. Anytime you need to start it up again you do so through the command line interface of your choice (Powershell or CMD in Windows, Bash in Linux, etc.) which I would argue is an important aesthetic for technically driven individuals or engineers. The text based CLI is gritty and requires some technical knowledge to read, but for a user it feels like you're closer to the heart of the system. The Jupyter lab UI has no animations nor any visual transitions from one view to another. The software does allow for plugins, which have their own custom aesthetics. The only real color in the basic Jupyter notebook comes from file type icons, like the main project file or csv-files for tabular data. All in all, I would say that the aesthetics and sensory stimulus is bare and minimal, but for a good reason, since it makes it easier to focus on technical details and analysis.

When it comes to fantasy and narratives, I struggle to think of anything for this case. "This is a good tool for machine learning and data science" maybe or "You want as simple of a UI for this task as possible" or finally "It makes everyone's work easier, simpler and more straightforward if all the code, discussion and data are defined in a single file". These "narratives" echo general engineering/design/project work principles. In my view the narratives/fantasy underlying the gamification of a system/tool like this one come from the developer community in general, found on discussion boards like StackOverflow.

The mechanics of the Jupyter notebook exist as toolbars in the top, left and right sidebars. The mechanics and UI elements representing them are logically ordered into subgroups. The top bar has system actions, like controlling files, running a kernel or a help section. Under this the view has three distinct sections: a file explorer on the left, open windows in the middle and a runtime control section on the right. These allow a wide range of actions to be performed by the user.

Tying all of this together, I would say that the Jupyter lab development environment has some degree of gamification, but not as much as e.g. a piece of teaching software or an actual video game. UI elements in my opinion are somewhat universal, since their origin

lies in the research and application of human psychology and therefore the Jupyter environment will also have certain UI elements which implement gamification. I would argue that a piece of software like this which is intended to be used by a more technical/professional group of users has less gamification, on purpose.

Self-assessment

Structure 2/2

The text starts with a clear introduction where the problem and central concepts are defined. The text then has separate chapters for the analysis of the three central concepts and ends with a chapter that ties it all together.

Clarity 2/2

The text has clear and correct grammar and is easy to read and follow the central idea of the author.

Content 1/2

Maybe a piece of teaching software would have been easier to analyze, but this was the only thing I'm currently using.

Evaluation 2/2

All the main parts of the GEM are evaluated

Reality Check 1/2

Gamification is a fairly ubiquitous topic these days and is found in one way or another in almost every GUI. Still, some products have more of it than others.

Total 8/10 = 4