REFF: Peer-reviewed fact-checking for the web

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This Full-Stack Software Engineering project is a pilot study in creating a general purpose inline referencing system for fact-checking social media. The idea stemmed from the observation that information communicated via social-media has little to no trust behind it even when accurate. While the scientific community is well-versed in referencing and peer-review, the majority of Internet users are not. These people are the target audience.

The project will be in two parts: an investigation and a full-stack application. The investigation will explore problems of creating and promoting a suitable referencing protocol, including but not limited to: the bite-sized nature of social-media information exchanges and its effects on users; an apparently ever-shrinking attention span (Muhlen 2012) and its implications in media consumption; and people's perception of 'fake news' and how to authentically regain their trust. The web-platform will elevate information quality through rating-and-comment peer-reviews.

The backbone of the platform will be short URLs such as `reff.co/g2zX5r` which users can freely distribute alongside their posts. Each entry should suggest efficiently and intuitively whether the stated fact and the underlying source convey the same idea according to the reviewers' scrutiny. Figures 1–3 conceptualise the design intention.

The full-stack web-platform will be informed by the investigation, the literature review, and iterating the design and interface. It will use HTML, CSS, Python and the Django web-framework, with PostgreSQL for the database. The overarching design is a Django variation of the Model-View-Controller known as the Model-Template-View.

References

Muhlen, Ohno-Machado von (July 2012). 'Reviewing social media use by clinicians'. In: *Journal of the American Medical Informatics Association* 19.5, pp. 777–781. ISSN: 1067-5027. DOI: 10.1136/amiajnl-2012-000990. eprint: https://academic.oup.com/jamia/article-pdf/19/5/777/9517081/19-5-777.pdf. URL: https://doi.org/10.1136/amiajnl-2012-000990.

Figure 1: A Twitter post under the current state of online communication

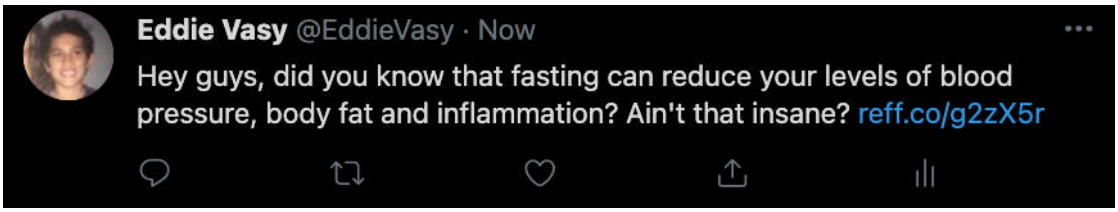

Figure 2: The same post but implementing the Reff protocol

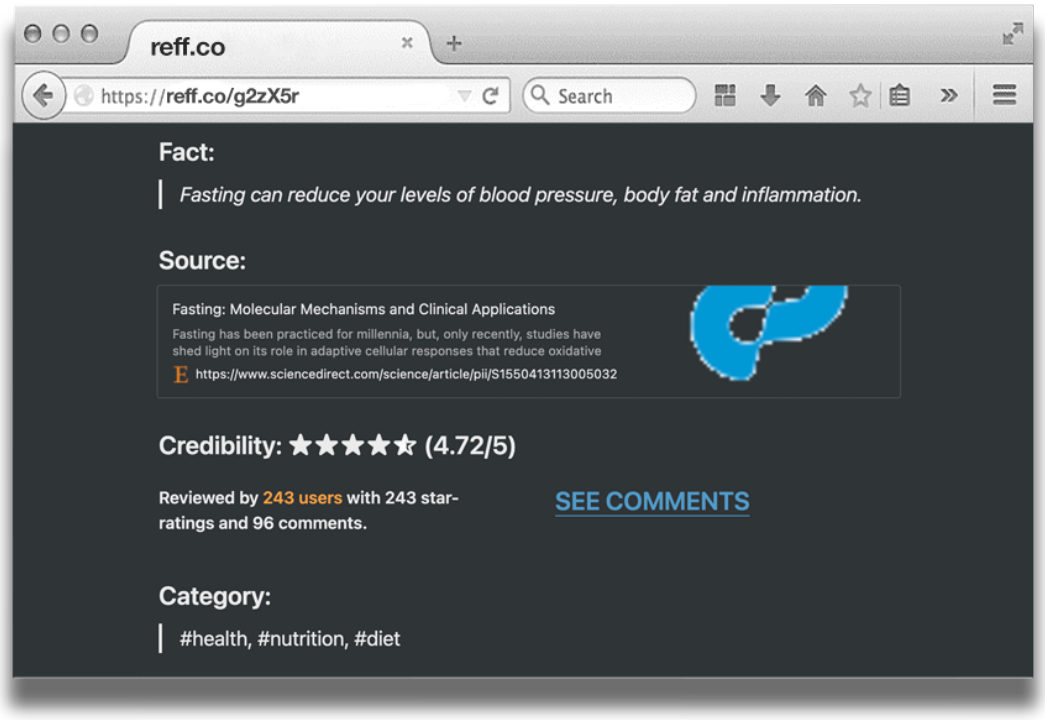

Figure 3: Conceptual design of the Reff entry referenced in the Tweet from Figure 2

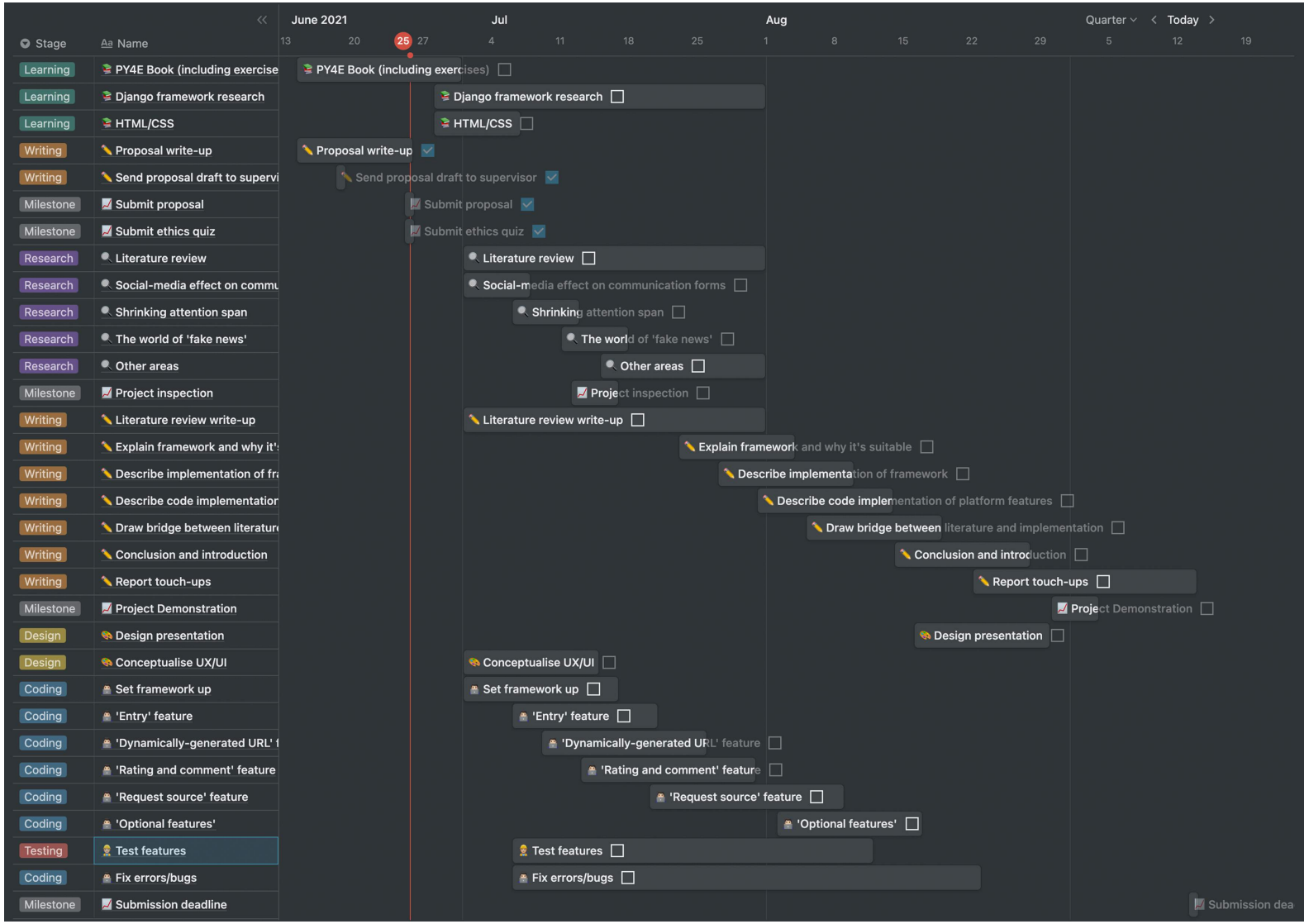

Figure 4: Project Gantt Chart (25th June 2021).