

Pretotype testing, an overview

Introduction

The ideas presented in this document were tested using the *pretotype* technique, and as such, they were evaluated with the aim of investing the least time and energy in order to prove or disprove their worth.

Description

The following paragraphs contain a brief description of each idea to be pretotyped.

1. **Overflow bot:** A bot that receives a question as input and search in the website [Stack Overflow](#) for the most related answer and provides the best answer as a result.
2. **EncorAlpha bot:** A knowledge network for all your Encora related needs in one command. The idea is for the bot to search in various sources for the best information in order to solve the question posed by the Encorian, all accessible through the company's messaging app.
3. **TwitAnalyze:** An extension for the social media platform [Twitter](#) that shows real-time feedback of an emotion analysis of your twitter feed, being able to determine the dominant emotion behind each twit.

Hypothesis

Since the first 2 ideas are productivity related, the hypothesis is that this tool would be an effective aid for the users in order to find information quickly, as opposed to going on a search hunt by themselves.

As for the third idea, the key would be to see how much impact this function has on users, whether they like it, think it is interesting or useful. The hypothesis is that at the very least they will find it amusing, at best it could be a useful tool to filter their feed.

Experiment description

The pretotype technique that will be employed to check these ideas is the one known as '**Mechanical Turk**'. The idea is to pretend we have a working project and deploy it for use to the users, mimicking to the best of our abilities an accurate performance to the real thing.

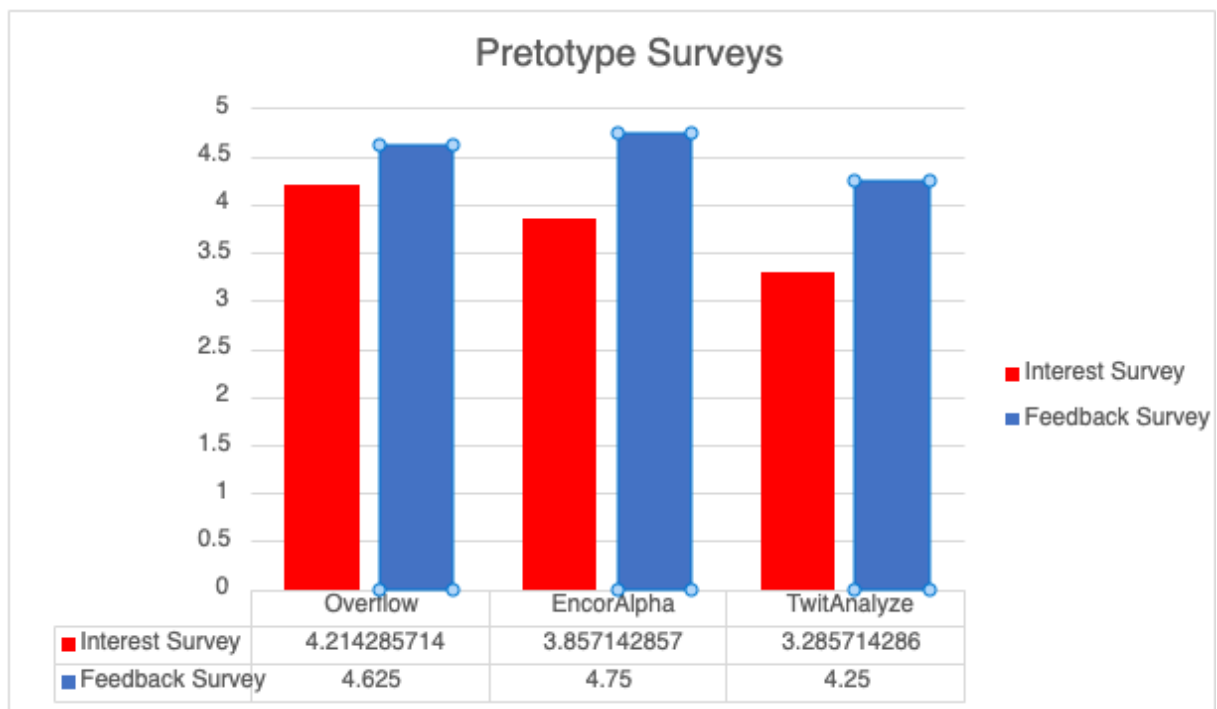
For doing this task, we shall employ a channel in the company's messaging app, said channel being named '#pretotypes-valenciana' (this channel is currently archived and can be accessed to check how the prototyping session went down). On this channel, the users will be presented with a command to invoke each idea's "bot". In actuality, I will be playing the role of the bot, answering within the restrictions that each bot has (for example, the Overflow bot may only check Stack Overflow for answers) to the best of my abilities. The size of this group will be limited in scale, as to not over-extend myself and give out a negative impression if the responses arrived to late.

Validation

In order to prove the worth of each idea, 2 surveys were conducted. The first one was sent 2 weeks ago with the aim of assessing initial interest on each idea (1 through 5 rating), and then after a week and after performing the prototyping session, another survey was sent, asking each participant to rate each idea's performance (1-5 rating) and provide additional feedback. The goal of these surveys was to detect any variation between the initial reaction and the actual response after seeing the prototypes in action. Depending on the amount and nature of this variation, the ideas shall be accepted, rejected or reworked.

Results

The following chart shows the average score for each idea, both in the first and the second survey.



As we can see, every single idea got a better response after the prototype phase.

Some key insights we get from this are:

- While all ideas got an increased rating in the feedback survey, the Overflow bot only got ~10% increase, while EncorAlpha almost got a 25% increase and TwitAnalyze a 30% one, indicating that these 2 ideas were initially underrated.
- The EncorAlpha bot was second in the interest survey but first in the feedback one, indicating that the implementation of this idea was welcomed by the users and that it has a high interest by the users to be implemented.
- While the TwitAnalyze got a huge boost after the prototype phase, it still is the lowest ranked idea, so perhaps it needs a rework in its purpose and the direction of the project.

After seeing these results and going through the hurdles of executing each prototype idea, I would say that while all of the ideas have potential and clear the benchmark proposed in the hypothesis, the clear winner and idea that should get most of the focus in future work should be **EncorAlpha**, as it has the highest acceptance within our community.

Conclusions

The idea of executing these simple strategies in order to discard bad ideas (or salvaging seemingly bad ones), was incredibly useful and eye opening, as it opens the door to a more aggressive sort of creativity, where we barrel through our options quickly in order to maximize our time and effort.

The application of this technique also provided me insight into the limitations and nuances of actually implementing the ideas that I hadn't thought before testing them, such as the complexity in actually finding an optimal answer through a non-trivial method (such as picking the first or highest rated answer), which it seems would require some sort of Machine Learning algorithm. The power of presentation also came in full effect, as I suspect that one of the reasons that the TwitAnalyze bot got such a good reception after the prototype was because of the graphical responses (such as the one pictured below) which garnered a lot more interest than a simple text response.



Happy

21.53 %



Angry

5.06 %



Excited

33.99 %



Sad

12.19 %



Fear

23.19 %



Bored

4.04 %