Week 4 Journal

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I. Overview

For my area I'm looking at Anti-Patterns in code, these are also known as code smells. I've also seen them referred to as Atoms of Confusion and nano patterrns.

II. Journal Entry

For my learning process so far, I've looked at how to use google scholar to optimize my time looking for the latest research. Up until this class I would go onto the UCCS library website and use the research databases to find papers. It has been very helpful to set up my google scholar profile to automatically show the papers I can download through my UCCS credentails. I have a couple of things on my to-do list. I need to speak with Prof Boult about how to get a private github as a student, as that would be very useful, and I have a handful of questions I would like to get his opinion on.

III. Journal 4

A. Who is the Main Character

The main character is the anti-pattern. I need to find a way to clearly define the anti-pattern. There are some authors who define it as interchangeable as a code smell. I don't think that is correct. I think code smells are precursors to anti-patterns. Meaning that an anti-pattern is a known bad problem, where a code smell may lead to a problem.

On second thought, is the character the developer? And is what is interesting about it their human nature which leads them to confusion? I would guess tha most developers think that a compiler is well-defined and bugs in code must be due to lack of understanding not code structure that is good at confusing human nature.

B. What Character Traits Make them Interesting

What's interesting about anti-patterns is that they have a very human aspect to them. They overlap the way humans think with the way code is written. They connect common ways of human misunderstanding to software development. Personally, I think most developers expect code to work as they understand it to. They don't spend a lot of time thinking about how code will work in ways they don't expect. It is in the nature of most engineers to see things in mathematical/binary ways and ignore the human aspects to what they are working on. Example boeing 737 max. Code developers expected pilots to respond with typical emergency procedure, but when the errors occurred they pilots were overwhelmed by the amount of feedback they recieved in the cockpit (need reference).

C. What do the Character Need to do or Get (Goal)

The anti-patterns need to be understood and identified. Once that happens developers can change their best practices. The best practices should be created in such a way that the typical misunderstandings of the developer

D. Why is That Goal Important (motive)

Note: not many papers about code smells talk about why it is important.

E. What Conflicts/Problems Block the Character

F. Ho do they Create Risk and Danger

G. What Does the Character Do (Struggles) to Reach Goal

H. What Sensory Details Will Make the Story Seem Real

The files for this latex document are in the github repository located at `https://github.com/rodger79/CS6000`

Papers that were scanned and trashed are referenced in the bibliography below.

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