CS 311 - Introduction to Software Engineering

Assignment 02: due (Friday, Oct 26, 2018)

In the lectures, we discussed software architecture patterns and the characters of good architecture. However, in practice, it is common while developing a software system to drift towards a lousy architecture. The **Big Ball of Mud** Pattern is the most frequently deployed architecture in software systems. Read the paper "Big Ball of Mud" by Brian Foote and Joseph Yoder, then answer the following questions:

Q1) What are the main reasons that lead software developers to use bad architecture patterns such as the Big Ball of Mud? **[20 points]**

Q2) There are 6 poor software architecture patterns in the paper. Give a brief description of each pattern **[50 points]**

1. BIG BALL OF MUD
2. THROWAWAY CODE
3. PIECEMEAL GROWTH
4. KEEP IT WORKING
5. SWEEPING IT UNDER THE RUG
6. RECONSTRUCTION

Q3) Select any two poor software architecture patterns from the six patterns listed in the paper and explain, how we could detect these patterns and how we can avoid them. Give clear examples to justify your answer. **[30 points]**