

3. Code each stage to completion and system test the whole prototype, resisting the temptation to push too quickly beyond the stage design parameters. Make sure to get full system tests of each stage to inform the design of the next.
4. Iterate the design and return to step 2. At no stage should you be afraid to rewrite complete components from scratch.

In an academic environment, where commercial pressure is practically absent, it is easy to apply the knife to the code in stage 4. It takes bravery to be as cruel as necessary in commercial settings, but we contend that lack of nerve at this type of juncture is a major underlying, and often misidentified, cause of project failure, especially for the most innovative and challenging ones.

To get a beautiful architecture with truly unexpected benefits, stay true to your beliefs and have no fear.