

A 7 step-guide to designing great software © ArjanCodes

Before We Dive In

Have you ever been stuck trying to find a way to write software that can solve a complex problem, but that doesn't become a huge mess of spaghetti code? Do you often end up in a situation where you know what your software should eventually do, but you have no idea how or where to start? I've been there many times, just like you, and I've written this 7-step plan to help you create consistently great software designs.

I've been developing software for as long as I can remember (but I have pretty bad memory, so there's that (a). I started coding when I was a kid, mostly writing games and fun little programs in BASIC. When I turned 18, I enrolled in Computer Science at the university, and then continued to both a Master and PhD degree in Computer Science. I've been a Computer Science teacher for almost 20 years, and I've launched several startups in which I created software products used by thousands of people.

When I design a new piece of software or add a new feature to an existing software application, I first write down the idea in a structured way in a Software Design Document. Below you'll find the structure that I use for this, separated into 7 different sections. Beneath each section name, I've added a bullet list of the main points to cover in that section. I also added a few personal notes in each section (mostly some random thoughts and ramblings).

I hope you'll find a few useful nuggets in this template, and that it helps you in improving your software designs - let's dive in!