

Test driven development

- Test driven development (TDD) is an incremental development approach that links increments to test cases
- We specify a test case and write code that satisfies that one case
- Then we add another case and revise the code so that it satisfies both
- Then we add another and revise, and so on, and so on ...
- Can be used as a prototyping approach for any level of component (a single function/method, a class, a subsystem, etc)

Not to be confused with agile...

- While the two approaches can be used together, they are not quite the same thing
- TDD generally refers specifically to the code development, whereas agile is used to refer to the overall project methodology

Behaviour-driven development (BDD)

- An extension of TDD, where we try to define desired behaviours of the product and, based on the behaviour, design an appropriate (preferably automated) test
- Often linked with a domain-specific language (DSL) designed to describe the expected behaviour and outcome, and from which we can derive a test script
- The DSLs are meant to be closer to natural language, but carefully attuned to the specific project area/topic (domain)