

When do you know that you have enough?

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Types of projects

- Lab report (class level)
 - Fill in a template
- (Typical) class project/assignment
 - Test knowledge from that class
- Data science capstone project
 - Tests your command across CDS related courses
- Masters research paper
 - Application (local, national)
- PhD research paper
 - Contribution is regarded as having International value

Project scope

- Lab report (class level)
 - As data changes, results will change
 - Little room for innovation
 - Template usually provided by the Instructor
 - Assessor: Instructor
 - Benchmark: None

(Typical) class project/assignment

- Scope is minimal and require investigation of a select topic in that class
- Short paper to show that you are familiar enough with the topic to talk about.
- May contain some analysis
- Topic usually provided by Instructors as part of class requirements
- Assessor: Instructor
- Benchmark: None

Project scope

- Data science capstone project
 - Tests your command of CDS related courses
 - You are the most knowledgeable at this point as an undergraduate
 - You need to develop a data science project
 - "Project (or program) as any **undertakin**g, carried out individually or collaboratively and possibly involving **research or design**, that is carefully **planned** (usually by a project team[citation needed]) **to achieve a particular aim**." [Source: Wikipedia]
 - Tests your knowledge of the steps required to take a project from start to finish
 - Systematic in designing your pipeline
 - It's a collection of activities to show that you're ready for the job market/the next academic milestone.
 - Topics usually come from students and the Instructor
 - Assessor: Instructor, Employer
 - Benchmark: Conference poster/conference paper

Project scope

- Masters research paper
 - Already have a good command of a specific disciple areas (e.g., CDS) and/or a practitioner
 - Application of an existing approach to a new context
 - Local, national
 - Topics usually come from students and the Instructor
 - Assessor: Local committee of University experts
 - Benchmark: Conference paper

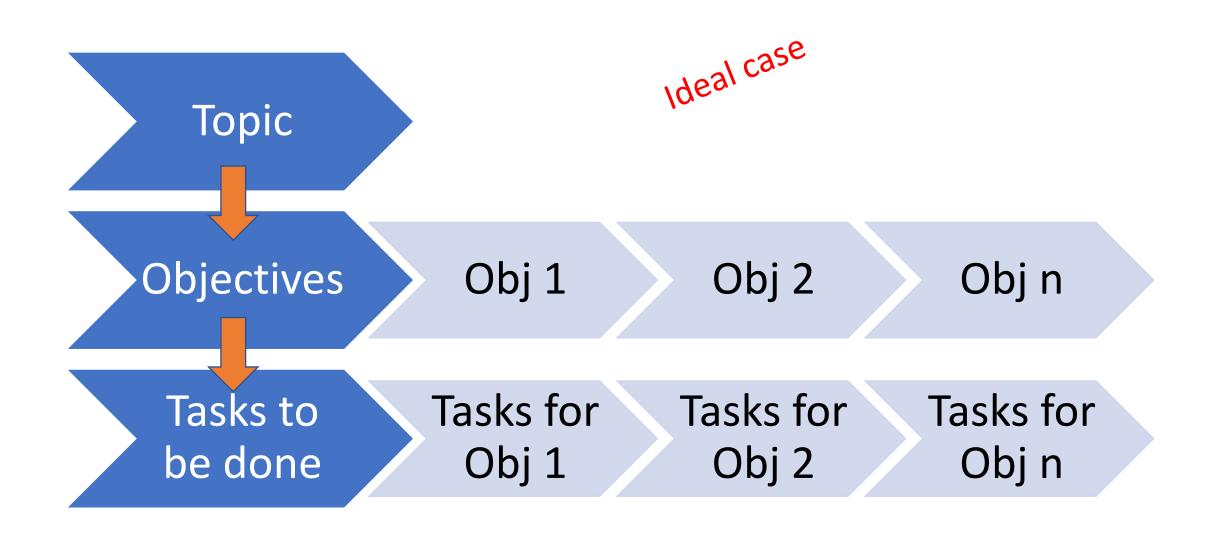
PhD research paper

- Advanced knowledge within and across disciplines
- You are the expert in a specific niche, not your advisor
- Contribution is regarded as having International value
- Fill a gap in existing knowledge
- Does not exist before, or at least not in the context of how its being applied in the current work.
- Topics usually come from students, Instructor, International experts (review of literature)
- Assessor: International experts
- Benchmark: Usually 2 or more internationally recognized journal publications

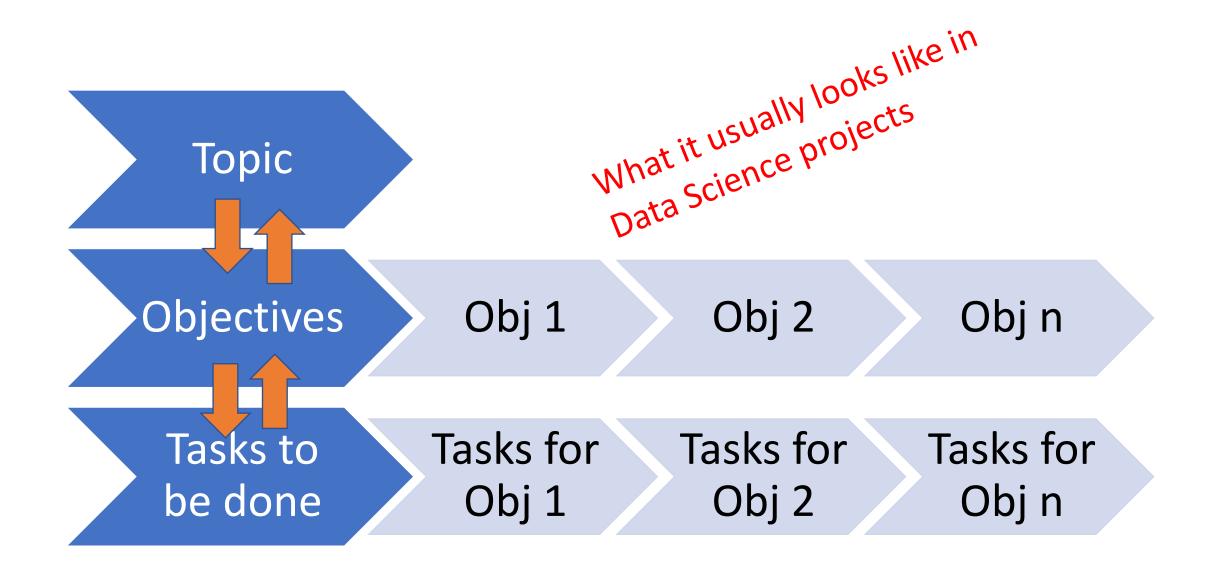
When do you know that you have enough

- The main question that you have to answer
 - What is your contribution?
- Different levels
 - Lab report fill in
 - Typical class project Knowledge from that class
 - Data science capstone project knowledge from CDS classes
 - Masters research paper Application (local, national)
 - PhD research paper International value

Where does it all fit in?



Where does it all fit in?



Because we live with uncertainty

