

## Use Case and Requirements

Michael McCool 26 July 2023

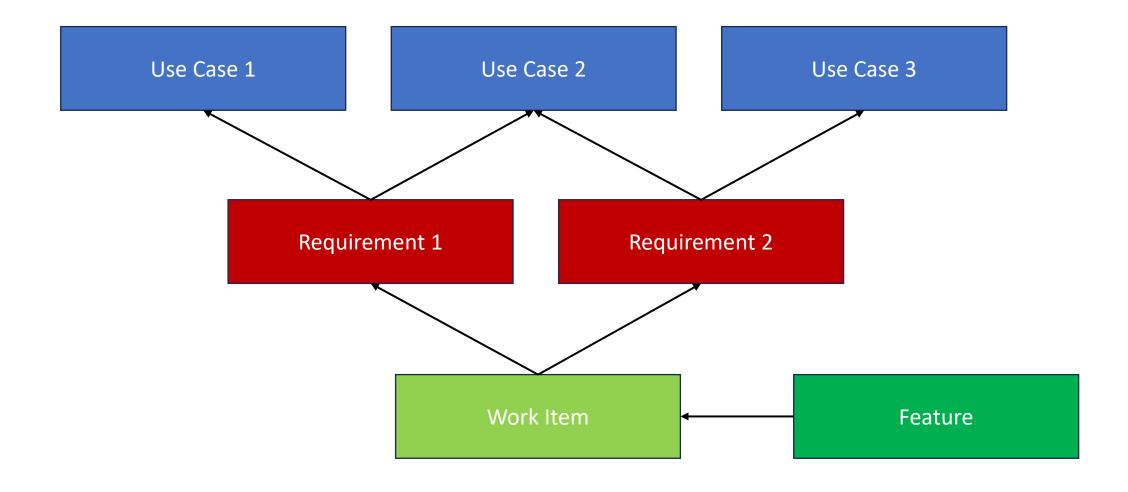
## Use Cases and Requirements



- Use cases should ultimately motivate standards work:
  - Use cases should have defined requirements
  - Features should be defined to satisfy requirements
- Problems:
  - We have a large number of new work items on the table
    - but no clear connection to requirements or use cases
  - Can be difficult for authors of use cases to define all requirements
  - Existing features are also not directly tied to use cases
  - We have a large number of use cases documented but
    - these often do not specify requirements clearly
    - are not prioritized
    - have gaps and redundancies
  - Some "use cases" are really just technologies or broad domains
    - Use cases should have a defined "user"

# UC → Requirement → Feature





#### Links and Resources



- Use Cases and Requirements Document
  - <a href="https://w3c.github.io/wot-usecases/">https://w3c.github.io/wot-usecases/</a> (Editor's draft, rendered)
- Requirements Template
  - https://github.com/w3c/wot-usecases/blob/main/REQUIREMENTS/requirementstemplate.md
  - Example: Geolocation
    - <a href="https://github.com/w3c/wot-usecases/blob/main/REQUIREMENTS/geolocation-requirements.md">https://github.com/w3c/wot-usecases/blob/main/REQUIREMENTS/geolocation-requirements.md</a>
- Requirements Summary
  - https://github.com/w3c/wot-usecases/blob/main/REQUIREMENTS/requirementssummary.csv
- Older Requirements Document (Discovery):
  - https://github.com/w3c/wot-usecases/blob/main/REQUIREMENTS/discovery.md

#### Security



- Security/Privacy Features are generally to mitigate "risks"
  - S&P sections generally have the structure of a defined risk, followed by mitigations, some of which may be normative
- Risks are documented in the "Security and Privacy Guidelines" document
  - Although it needs to be updated
  - some risks in current documents are missing (e.g. DDoS)
- Need to identify which use cases have which risks

#### Discovery



- Original "Simple" Requirements Document can be updated
  - https://github.com/w3c/wotusecases/blob/main/REQUIREMENTS/discovery.md
- Probably also want to connect to geolocation requirements
- Can inline into Use Cases and Requirements Document.
  - Expand existing 1-paragraph "Discovery Requirements" section
- Note:
  - Current Discovery spec does not meet the requirements stated in either location!

#### Suggested Plan



- Expand "Requirements" Section in Use Cases and Requirements document to define requirements (if not defined elsewhere) and connect them to use cases.
  - Want to avoid editing use cases themselves for authorship and consolidation reasons
- Keep it simple:
  - A named requirement and a few sentences defining each one is enough.
  - If defined elsewhere (e.g. security risk) can link to another document for definition.
    - However, best IMO if requirements are in a "published" document, not a random MD file somewhere...
  - Links to use cases motivating each requirement
  - Do not have to link each requirement to ALL use cases motivating it

#### Discussion

