

# INFS3101/7100 Ontology and the Semantic Web

Week 3 Tutorial  
Institutional Facts

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## Tutor Info

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- Consultation: will start from week 4
  - Suggesting: consultation session right after the tutorial session.

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## Key Terms

- Brute fact X counts as institutional fact Y in context C.
- Brute fact:
  - exists in the physical world, independent of humans
- Institutional fact:
  - depends on a human society.
  - e.g. the meaning of the document is an institutional fact.
- Speech Act:
  - Institutional fact is a record of a speech act.
  - Performative (Active) Speech Act creates a NEW institutional fact.
  - Informative (Passive) Speech Act lets other players come to know the institutional fact.
- Context:
  - includes *framing rules* and *background*.

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## Question 1A

- Institutional fact: An Australian \$1 coin
- Brute fact : A Metal Disc Plate.
- Context: The \$1 coin is legal currencies for paying goods and services Australia-wide.
- Speech Act: Reserve Bank of Australia **defines** the coin value and **mints** the coin.

Performative Speech Act

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## Question 1B

- Institutional fact: Your Driver Licence
- Brute fact : A piece of laminated paper
- Context: The written and driving tests must be passed.
- Speech Act: One of state transport departments, e.g. Queensland Transport, **grants** the licence.

Performative Speech Act

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## Question 1C

- Institutional fact: Your citizenship
- Brute fact : A piece of paper (certificate).
- Context: The criteria of citizenship must be met.
- Speech Act: DIMIA **grants** the citizenship.

Performative Speech Act

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## Question 1D

- Institutional fact: How you are legally able to reside here to study in UQ
- Brute fact : A piece of label (student visa) on your passport.
- Context: The visa applicant must meet the studying criteria set by DIMIA
- Speech Act: DIMIA **grants** the visa.

Performative Speech Act

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## Question 1E

- Institutional fact: A goal in soccer
- Brute fact : The ball inside the rivalry gate
- Context: 1) An official game is in progress, 2) the entire ball totally passes over the entire goal-line between the goal posts and under the cross bar, and 3) the Referee confirms the goal by points toward and move toward the "centre spot".

Speech Act: The player **kicked** the ball into the goal.  
Performative Speech Act

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## Question 2A

**Scenario:** *Mary, a lessee, paid a rental bond to Residential Tenancies Authority (RTA) through Mr. Smith, a lessor, and then Mary received the bond receipt from RTA a few days later.*

**Roles/Players:** A lessee/Mary, a bond holder/RTA, and a lessor /Mr. Smith.

**Institution fact:** The rental bond lodgement.

**Brute fact:** legal currency in the exactly required amount, bond application form.

**Institution fact:** The rental bond acceptance.

**Brute fact:** The bond receipt

**Context:** Residential Tenancies Act (1994)

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## Question 2A (continues)

**Scenario:** *Mary, a lessee, paid a bond to Residential Tenancies Authority (RTA) through Mr. Smith, a lessor, and then Mary received the bond receipt from RTA a few days later.*

**Who created the facts:** The lessee created the first fact by lodging the bond, and RTA created the following fact by sending back a receipt to the lessee.

**Who store the facts:** RTA is responsible for storing the primary record of the *bond lodgement and acceptance* because RTA needs to refund that bond to the lessee upon receipt of the instruction from the lessor.

**Speech Act**

– Performative: Mary *lodged* the bond, and RTA *accepted* the bond and *sent* Mary the receipt.

– Informative – RTA *received* the bond lodgement, and Mary *received* the bond receipt.

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## Question 2B

**Scenario:** *Marie, a potential lessee, was looking at www.realestate.com.au for seeking accommodation. She found a one-bedroom unit satisfying all of her requirements, posted by Ray White, an estate agent.*

**Roles/players:** a potential lessee/Marie, an estate agent/Ray White and a website/www.realestate.com.au.

**Institutional fact:** estate advertisements

**Brute fact:** text, images, icons, and so on

**Context:** As implied by the website's name and the website nature, this is a place for advertising the properties for lease and on sale.

**Who created the fact:** The estate agent created the fact because the agent advertised the lease properties on the website.

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## Question 2B (continues)

**Scenario:** *Marie, a potential lessee, was looking at www.realestate.com.au for seeking accommodation. She found a one-bedroom unit satisfying all of her requirements, posted by Ray White, an estate agent.*

**Who stored the facts:** The servers behind the website are responsible for storing the primary records of the properties for lease and on sale.

**Speech Act:**

– Performative – the website rendered the web pages as per the potential lessee's request.

– Informative – the potential lessee was presented the searched results.

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## Question 2C

Scenario: *Mark, a lessor, bought furniture from Super A-Mart, and delivered the furniture to a leased apartment. As Peter, a lessee, moved in, the apartment had been furnished.*

**Roles/Players** – a lessor/Mark, a lessee/Peter, and a furniture shop/Super A-Mart.

**Institutional fact** – a furnished apartment

**Brute fact** – The furniture

**Context** – The lease shows that the leased apartment is furnished.

**Who created the fact:** The lessor created the fact because he bought and delivered the furniture to the apartment.

**Who stored the fact:** The lessor is an owner of the furniture and responsible for storing the primary record.

### **Speech Act**

Performative: The lessor bought and delivered furniture

Informative: The lessee saw the furniture in the apartment.

## Consultation Session

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