Normalisation

**Building Insurance and Damage History**

**UNF**

PROPERTY (property\_id, building\_id, building\_size, building\_class, building\_value, (insurance\_code, insurance\_name, insurance\_start\_date, insurance\_end\_date), (fire\_id, fire\_name, fire\_start\_date, fire\_damage, fire\_destroyed)

**1NF**

BUILDING (property\_id, building\_id, building\_size, building\_class, building\_value)

BUILDING\_INSURANCE (property\_id, building\_id, insurance\_code, insurance\_name, insurance\_start\_date,insurance\_end\_date)

PROPERTY\_FIRE (property\_id, building id, fire\_id, fire\_name, fire\_start\_date, fire\_damage, fire\_destroyed)

Partial dependencies:

insurance\_code -> insurance\_name

fire\_id -> fire\_name, fire\_start\_date

**2NF**

BUILDING (property\_id, building\_id, building\_size, building\_class, building\_value)

BUILDING\_INSURANCE (property\_id, building\_id, insurance\_code, insurance\_start\_date, insurance\_end\_date)

PROPERTY\_FIRE (property\_id, building id, fire\_id, fire\_damage, fire\_destroyed)

INSURANCE (insurance\_code, insurance\_name)

FIRE (fire\_id, fire\_name, fire\_start\_date)

Transitive Dependencies:

No transitive dependencies present

**3NF**

BUILDING (property\_id, building\_id, building\_size, building\_class, building\_value)

BUILDING\_INSURANCE (property\_id, building\_id, insurance\_code, insurance\_start\_date, insurance\_end\_date)

PROPERTY\_FIRE (property\_id, building id, fire\_id, fire\_damage, fire\_destroyed)

INSURANCE (insurance\_code, insurance\_name)

FIRE (fire\_id, fire\_name, fire\_start\_date)

Full dependencies:

property\_id, building\_id –> building\_size, building\_class, building\_value

property\_id, building\_id, insurance\_code, insurance\_start\_date -> insurance\_end\_date

fire\_id -> fire\_name, fire\_start\_date

insurance\_code -> insurance\_name

property\_id, building id, fire\_id -> fire\_damage, fire\_destroyed

**Building Damage Assessment Visit Report**

**UNF**

BUILDING\_DAMAGE(property\_id, property\_street, property\_town, property\_postcode, lga\_code, lga\_name, building\_id, building\_value, building class, fire\_id , lgaassessor\_id, lga\_assessor\_givenname, lga\_assessor\_familyname, lgaassessor\_damage,building\_destroyed, lga\_assessor\_date, insassessor\_id, insassessor\_givenname, insassessor\_familyname, (insassessor\_date-timearrived, insassessor\_date-timedeparted), insurance\_payout)

**1NF**

BUILDING\_DAMAGE (property\_id, building\_id, fire\_id, property\_street, property\_town, property\_postcode, lga\_code, lga\_name, building\_value, building class, lgaassessor\_id, lga\_assessor\_givenname, lga\_assessor\_familyname, lgaassessor\_damage, building\_destroyed,  lga\_assessor\_date, insassessor\_id, insassessor\_givenname, insassessor\_familyname, insurance\_payout)

BD\_ASSESSOR\_VISIT (property\_id, building\_id, fire\_id, insassessor\_dt\_arrived, insassessor\_dt\_departed)

**Partial dependencies:**

property\_id  -> property\_street, property\_town, property\_postcode, lga\_code, lga\_name

property\_id, building\_id -> building\_value, building class

**2NF**

BUILDING\_DAMAGE (property\_id, building\_id, fire\_id, lgaassessor\_id, lga\_assessor\_givenname, lga\_assessor\_familyname, lgaassessor\_damage,building\_destroyed,  lga\_assessor\_date, insassessor\_id, insassessor\_givenname, insassessor\_familyname,insurance\_payout)

PROPERTY(property\_id, property\_street, property\_town, property\_postcode, lga\_code, lga\_name)

BUILDING(property\_id, building\_id, building\_value, building class)​

BD\_ASSESSOR\_VISIT (property\_id, building\_id, fire\_id, insassessor\_dt\_arrived, insassessor\_dt\_departed)

**Transitive Dependencies:**

Lga\_code -> lga\_name

lgaassessor\_id -> lga\_assessor\_givenname, lga\_assessor\_familyname

insassessor\_id -> insassessor\_givenname, insassessor\_familyname

**3NF**

BUILDING\_DAMAGE (property\_id, building\_id, fire\_id, lgaassessor\_id, lgaassessor\_damage, building\_destroyed,  lga\_assessor\_date, insassessor\_id, insurance\_payout)

LGA(lga\_code, lga\_name)

LGA\_ASSESSOR(lgaassessor\_id, lga\_assessor\_givenname, lga\_assessor\_familyname)

INSURER\_ASSESSOR(insassessor\_id, insassessor\_givenname, insassessor\_familyname)

PROPERTY(property\_id, property\_street, property\_town, property\_postcode, lga\_code)

BUILDING(property\_id, building\_id, building\_value, building\_class)​

BD\_ASSESSOR\_VISIT (property\_id, building\_id, fire\_id, insassessor\_dt\_arrived, insassessor\_dt\_departed)

Full dependencies:

property\_id,  building\_id, fire\_id -> lgaassessor\_id, lgaassessor\_damage, building\_destroyed,  lga\_assessor\_date, insassessor\_id,  insurance\_payout

property\_id, building\_id, fire\_id, insassessor\_dt\_arrived -> insassessor\_dt\_departed

property\_id -> property\_street, property\_town, property\_postcode, lga\_code

lga\_code -> lga\_name​

property\_id, building\_id -> building\_value, building\_class

lgaassessor\_id -> lgaassessor\_givenname, lgaassessor\_familyname

insassessor\_id -> insassessor\_givenname, insassessor\_familyname