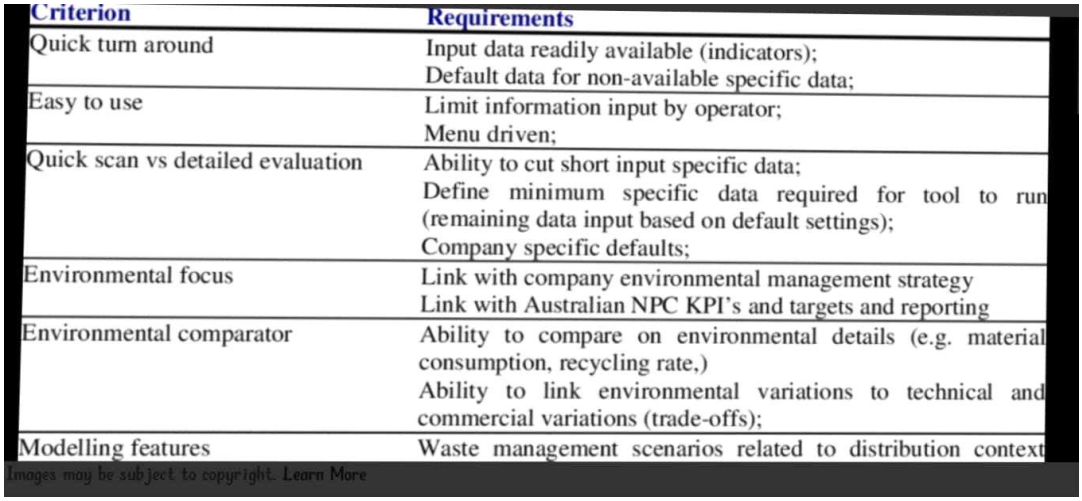
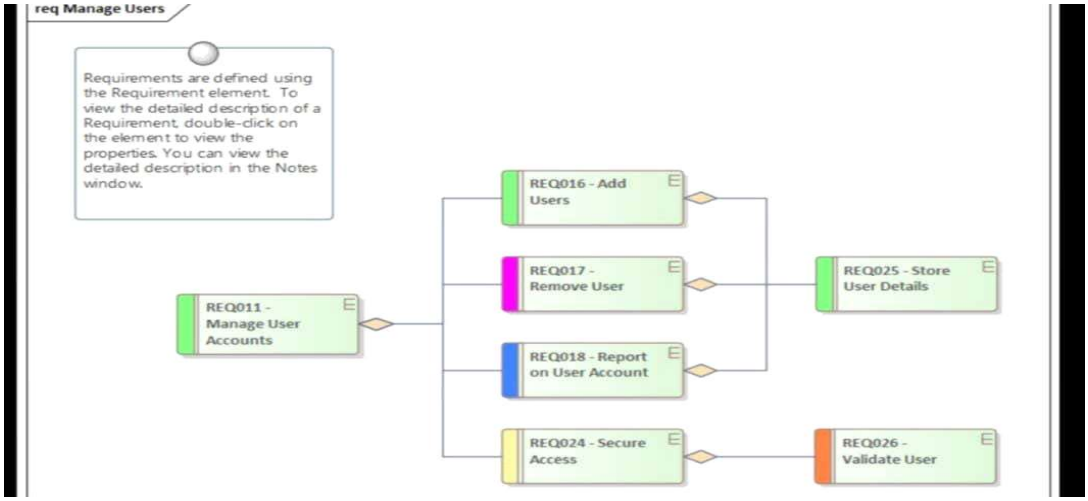
PROJECT DESIGN PHASE II

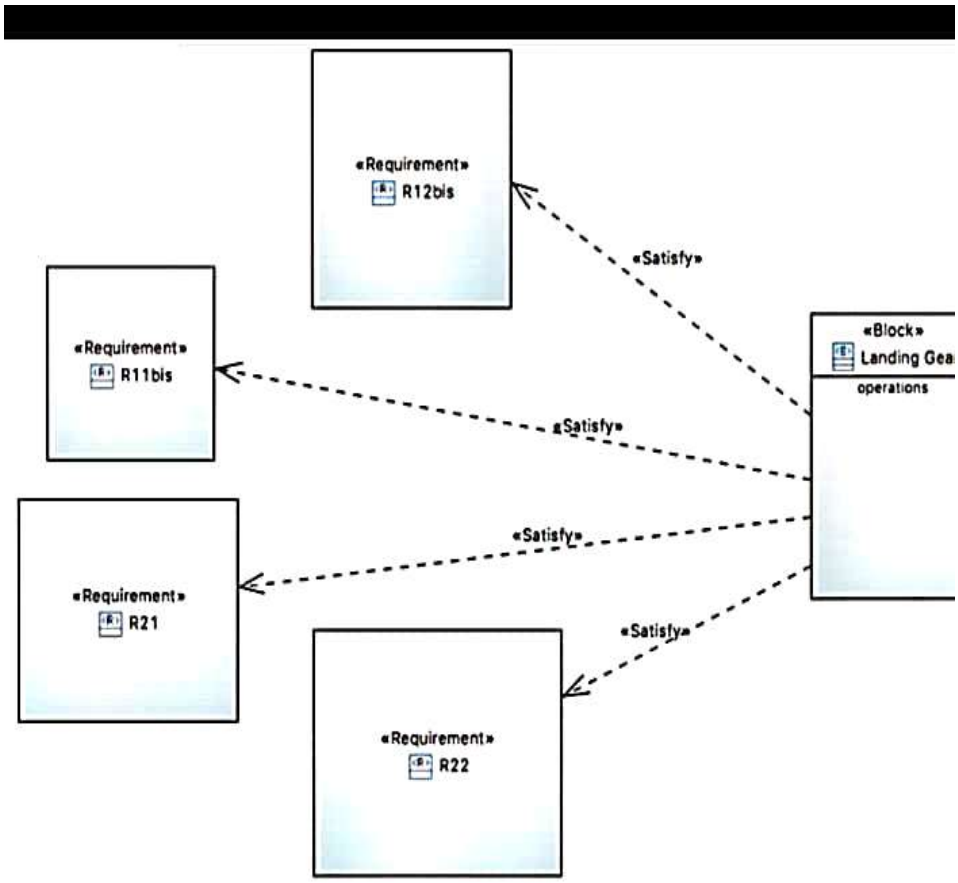
FUNCTIONAL REQUIREMENTS

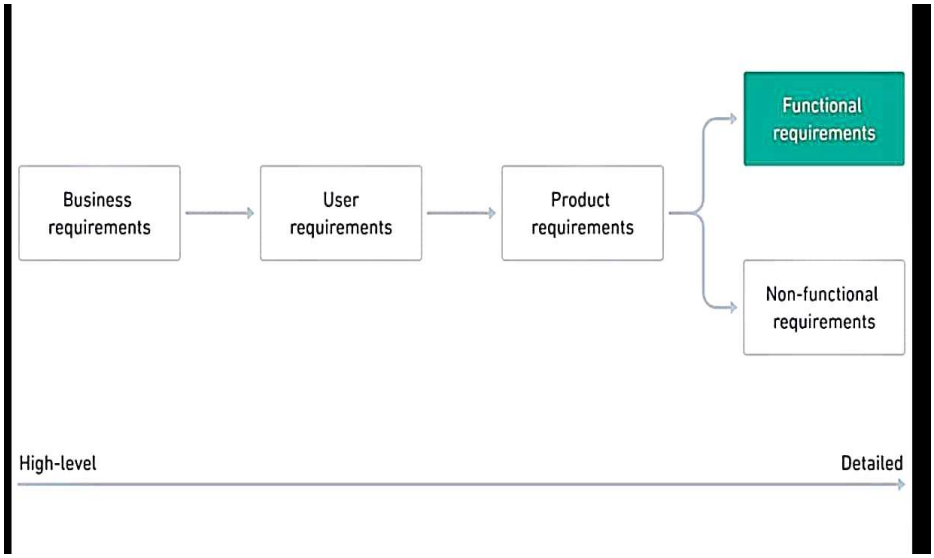
DATE	**14 OCTOBER 2022**
TEAM ID	**PNT2022TMID46908**
PROJECT NAME	**Airlines Data Analytics For Avaition Industry**
MARKS	**04 Marks**



Criterion	Requirements
Quick turn around	Input data readily available (indicators); Default data for non-available specific data;
Easy to use	Limit information input by operator; Menu driven;
Quick scan vs detailed evaluation	Ability to cut short input specific data; Define minimum specific data required for tool to run (remaining data input based on default settings); Company specific defaults;
Environmental focus	Link with company environmental management strategy Link with Australian NPC KPI's and targets and reporting
Environmental comparator	Ability to compare on environmental details (e.g. material consumption, recycling rate,) Ability to link environmental variations to technical and commercial variations (trade-offs);
Modelling features	Waste management scenarios related to distribution context




«Requirement»
R12bis
«Satisfy»
«Requirement»
R11bis
«Block»
Landing Gea
operations
«Satisfy»
«Satisfy»
«Requirement»
R21
«Satisfy»
«Requirement»
R22


Business requirements
User requirements
Product requirements
Functional requirements
Non-functional requirements
High-level
Detailed

FR_1 – Locate workpiece to required accuracy
- $FR_{1.1}$ – Locate the workpiece
  - $FR_{1.1.1}$ – Provide location directions – ***6 FRs***
  - $FR_{1.1.2}$ – Provide contact between locator and workpiece – ***6 FRs***
- $FR_{1.2}$ – Control accuracy of locations
  - $FR_{1.2.1}$ – Locate workpiece to required drawing tolerances – ***6 FRs***

FR_2 – Support workpiece against machining forces experienced during machining
- $FR_{2.1}$ – Hold workpiece in situ during machining – ***6 FRs***
- $FR_{2.2}$ – Support workpiece during machining – ***12 FRs***

FR_3 – Ergonomic requirements
- $FR_{3.1}$ – Prevent damage at the fixture workpiece interface
- $FR_{3.2}$ – Channel coolant flow during machining
- $FR_{3.3}$ – Ease the loading/unloading of the workpiece into/from the fixture
- $FR_{3.4}$ – Assist tool positioning during machining
- $FR_{3.5}$ – Error proof the fixture

Constraints:
C_1 – fixture cost
C_2 – fixture weight
C_3 – workpiece loading time
C_4 – workpiece unloading time
C_5 – fixture assembly time