Group Project – Team 5
Sprint 0

Fergal Byrne
Ger Hennessy
Ian Murray
Muireann Walsh (Product Owner
Point of Contact)
Paula Suciu
Ronan Monahan (Scrum Master)

Overview of M.O. to date

- The team held 8 daily standups
  - **The first 3 dealt with Project Planning**
    - Overall approach
    - Epic User Stories (tasks/subtasks)
    - JIRA Implementation
    - Assumption formation
    - Database design

Overview of M.O. to date

- The team held 8 daily standups

  - **The next 3 with Sprint 0 coding**
    - **Muireann/Paula** xls ->(Java) -> mySQL DB
    - **Ronan** input validation (Java)
    - **Ian/Fergal** Web Technologies (HTML JS)
    - **Ger** Code Review (meta)/Documentation

Overview of M.O. to date

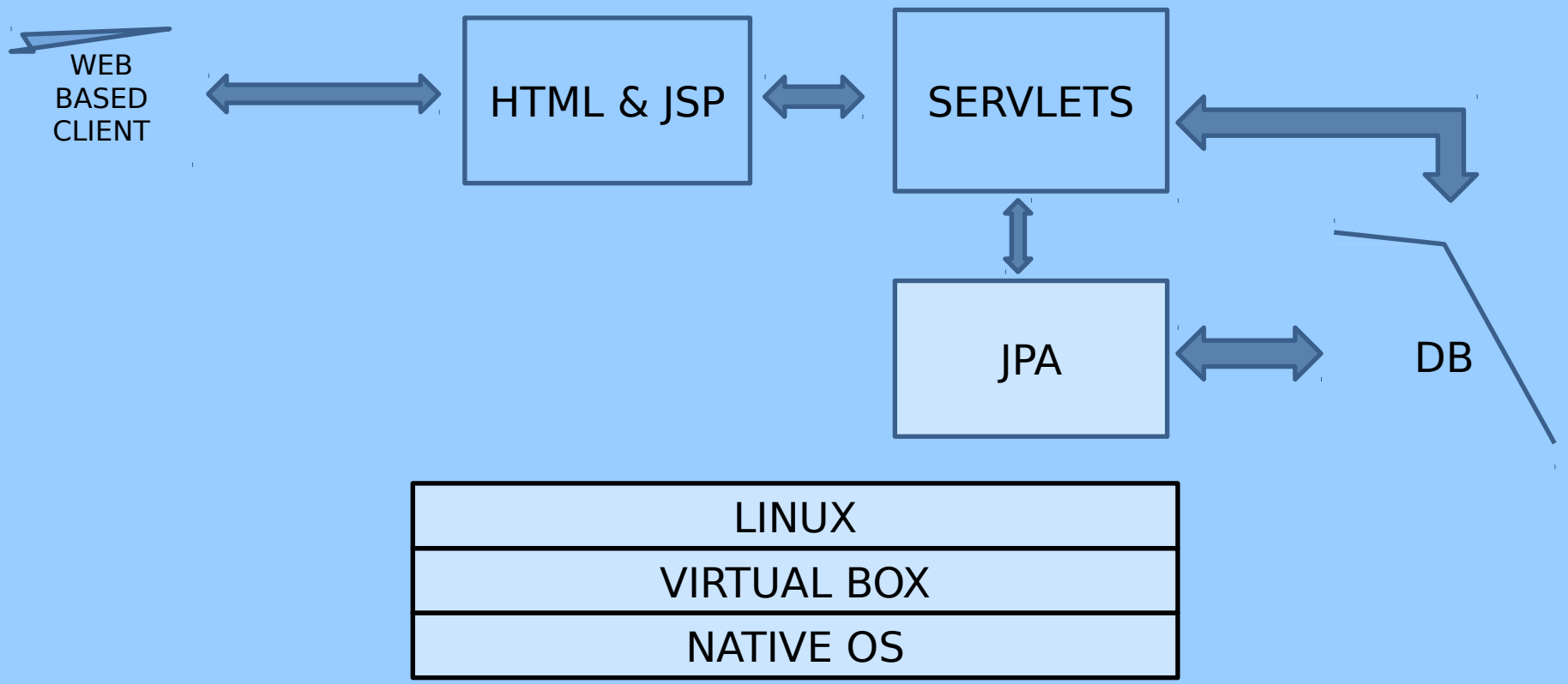
- The team held 8 daily standups

  - **The final 2 with Sprint 0 deployment/code submission/demo**
    - Integration
    - Testing
    - Submission of Sprint 0 code/docs
    - Demo Runthrough

ERICSSON

TECHNOLOGY

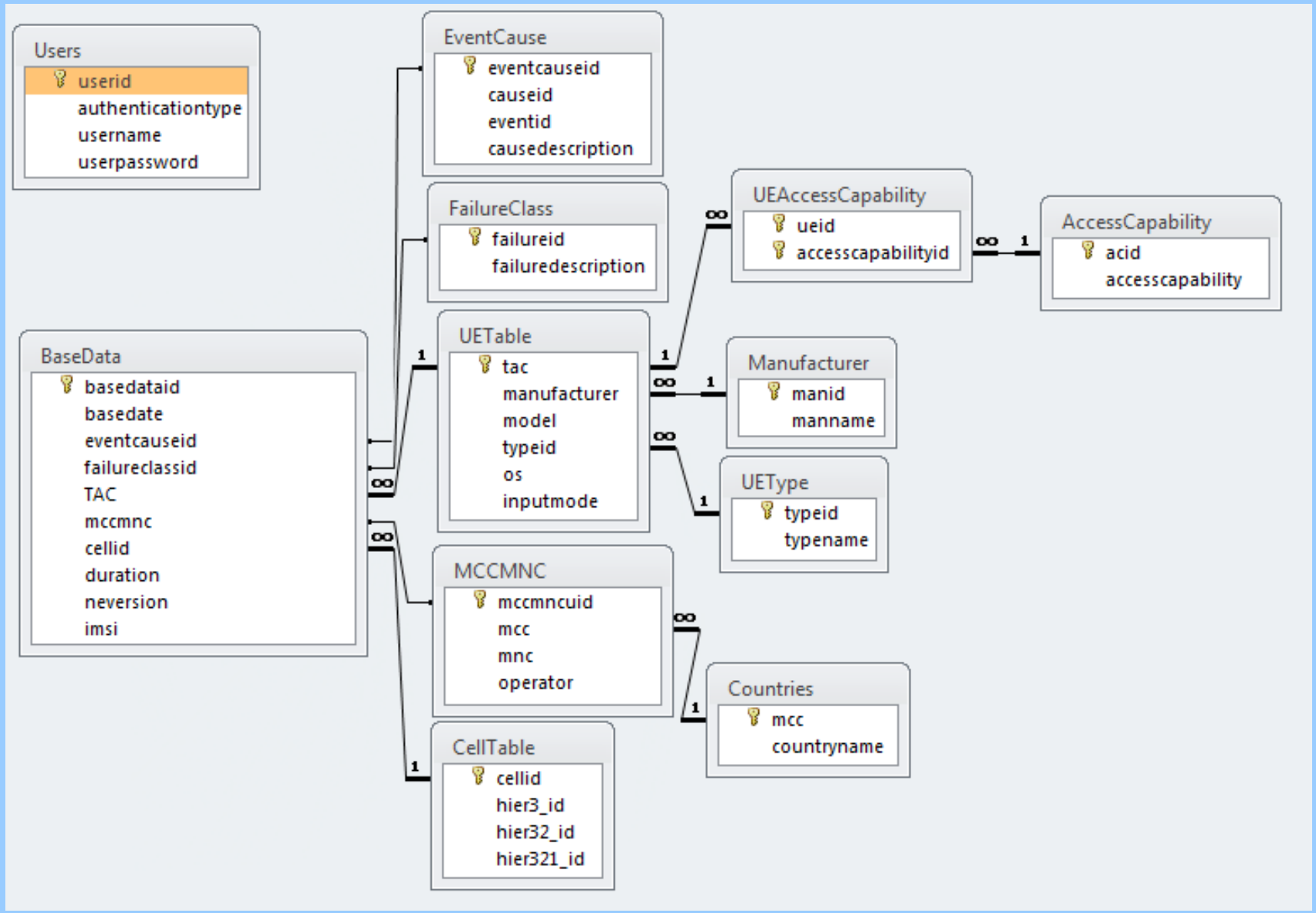
SERVER



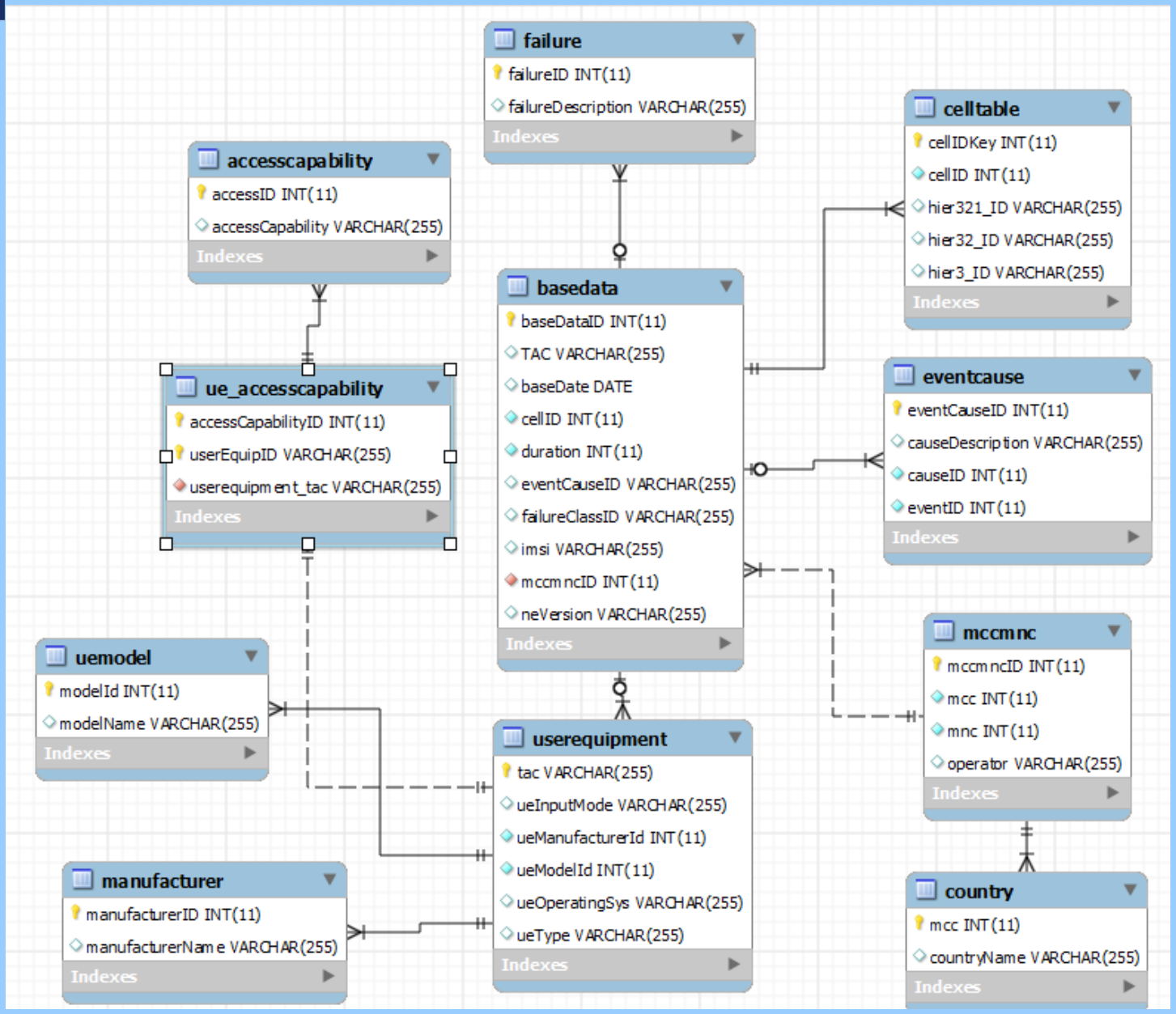
Database design

- In designing the database we focussed on three main aspects
  - Linking related data
    - Through assumptions
    - Confirmation with product owner
  - Removing redundancy
    - Identifying identical columns
    - Finding functional dependencies
    - Creating additional tables
  - Optimization through removal of repetition
    - e.g. Storing “GSM 800” as AutoNumber “1”

Initial Database Design



Current Database Design



MCC-MNC Table

Optimisation: Country field extracted into a separate table, linked to the MCC

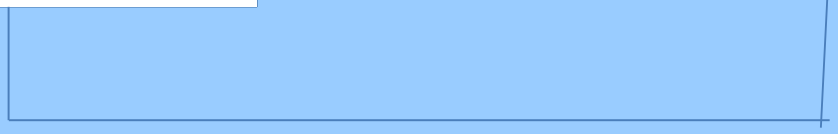
MCC	MNC	COUNTRY	OPERATOR
238	1	Denmark	TDC-DK
238	2	Denmark	Sonofon DK
238	3	Denmark	MIGway A/S DK
240	1	Sweden	Telia Sonera-SE
240	2	Sweden	H3G-SE
240	3	Sweden	AINMT Sverige AB SE

MCCMNC

mccmncID	mcc	mnc	operator
1	238	1	TDC-DK
2	238	2	Sonofon DK
3	238	3	MIGway A/S DK
4	240	1	Telia Sonera-SE
5	240	2	H3G-SE

Country

mcc	countryName
238	Denmark
240	Sweden
302	Canada
310	United States of America



Normalisation and Optimisation

TAC	MARKETING NAME	MANUFACTURER	ACCESS CAPABILITY	MODEL	VENDOR NAME	UE TYPE	OS	INPUT_MODE
100100	G410	Mitsubishi	GSM 1800, GSM 900	G410	Mitsubishi	(null)	(null)	(null)
100200	A53	Siemens	GSM 1900, GSM850 (GSM800)	A53	Siemens	HANDHELD	(null)	BASIC
100300	TBD (AAB-1880030-BV)	Sony Ericsson	GSM 1900, GSM850 (GSM800)	TBD (AAB-1880030-BV)	Sony Ericsson	HANDHELD	(null)	(null)
100400	RM-669	Nokia	GSM 1900, GSM850 (GSM800)	RM-669	Nokia	(null)	(null)	(null)

Original UE Table

Repeating fields:
Model =Marketing Name
Manufacturer = Vendor Name
Solution: both Model and Manufacturer columns extracted into their own table(optimisation)

TAC - AccessCapability: 1 □* relationship
Each access capability stored in a separate table and given an ID

An extra table connecting the TAC(UserEquipmentID) to the AccessCapabilityID

UE_AccessCapability

accessCapabilityID	userEquipID
1	100100
2	100100
3	100200
4	100200
3	100300
4	100300
3	100400
4	100400

AccessCapability

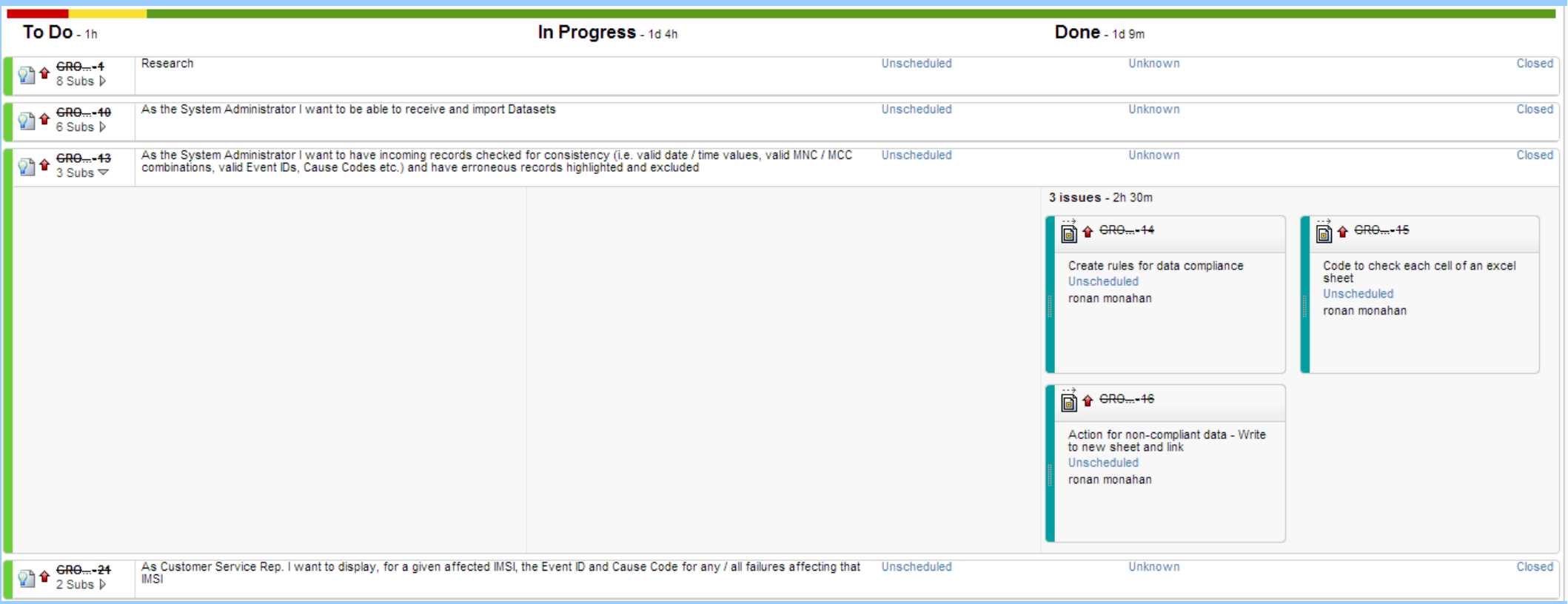
accessID	accessCapability
1	GSM 1800
2	GSM 900
3	GSM 1900
4	GSM850 (GSM800)
5	WCDMA FDD Band I
6	WCDMA FDD Band II
7	WCDMA FDD Band V
8	GPRS
9	WCDMA FDD Band IV
10	WCDMA FDD Band VIII

Data Validation

Base Data table is the only table where data validation takes place.

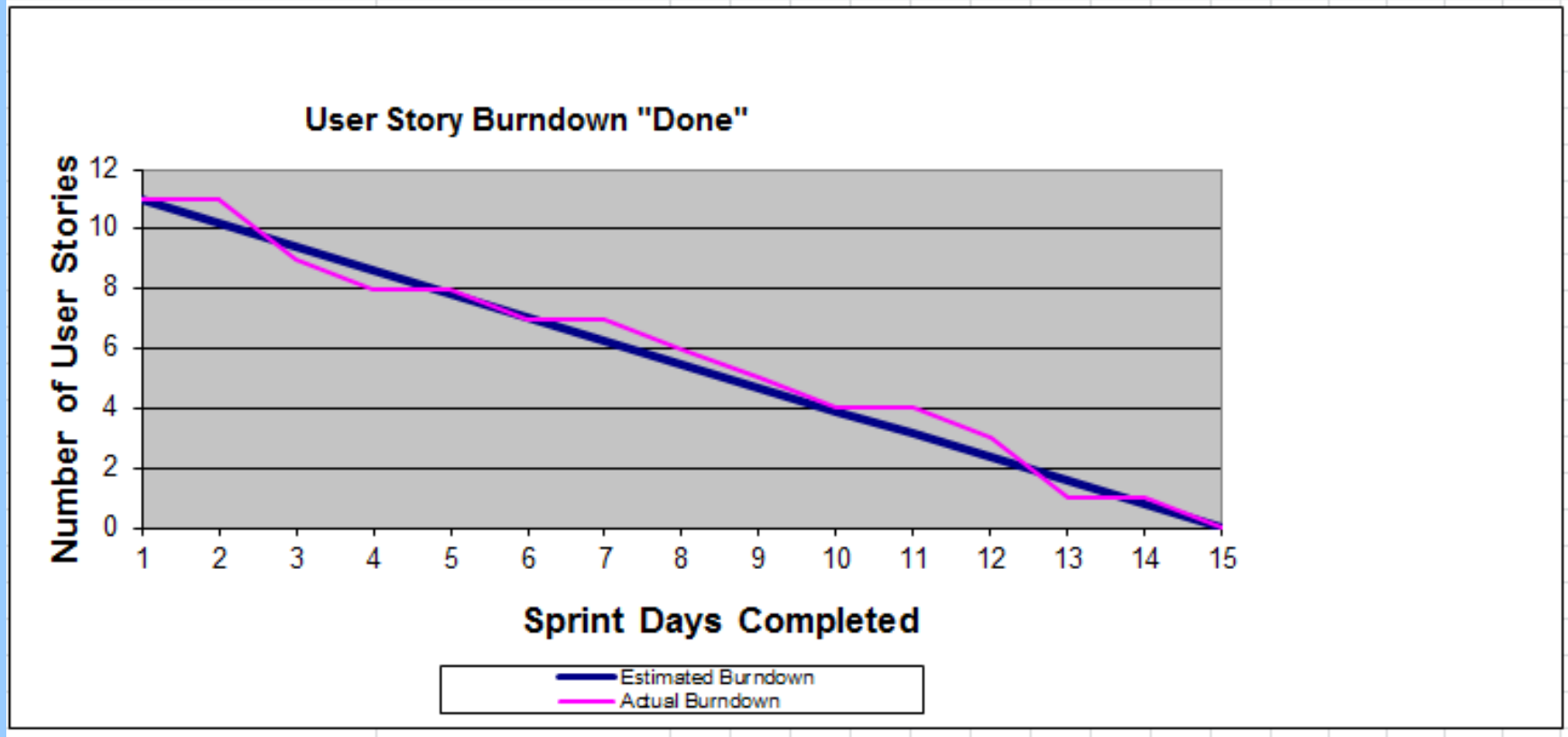
- **Date Column**: DD/MM/YYYY HH:MM, before today's date.
- **EventId**: must exist in EventCause Table
- **Failure Class**: must exist in Failure Table
- **UE Type**: must exist in User Equipment Table as "TAC"
- **Market**: must exisit in Country Table as "MCC"
- **Operator**: must exist in conjunction with MCC in MCCMNC Table
- **CellId**: This must be an Integer
- **Duration**: This must be an Integer
- **CauseCode**: must exist in the CauseCode Table
- **NE Version**: No restriction
- **IMSI**: This value must consist of 15 digits
- **HierIDs**: These values should be no longer than 19 digits long

Userstory JIRA overview



Burndown Chart

Working Days per Sprint	Planned sub-tasks															
15	11	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday
		11	10	9	9	8	7	6	5	5	4	3	2	2	1	0
Team	Sub-tasks Remaining	11	11	9	8	8	7	7	6	5	4	4	3	1	1	0
Project X	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15




ERICSSON


DUBLIN INSTITUTE of TECHNOLOGY
D·I·T
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH

Demo ...