DATABASE FOR
BUG TRACKING SYSTEM

DBMS Project

Submitted by:

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Problem Statement:

✓ Database for Bug tracking application, which enables users to add, remove or resolve bugs in their software.

✓ The bugs are prioritized and categorized and are then assigned to members of the organization based on their roles.
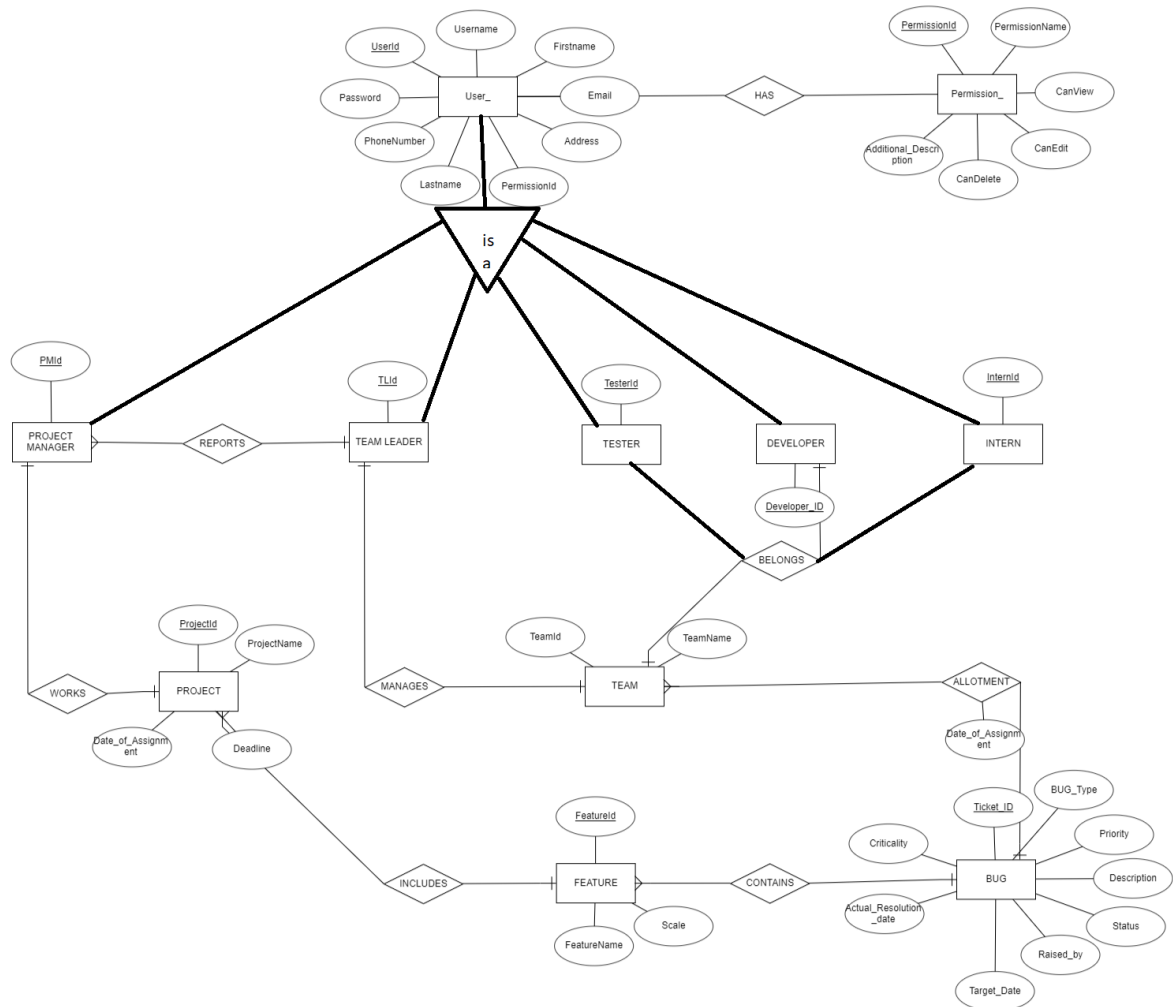
✓ The status of the bugs should be regularly updated.

Main Features:

✓ The organization lead creates his team and assigns them roles on the application.

✓ Bugs can be raised by both the users as well as by the development team of the concerned software.

✓ There should be restrictions on the visibility of the bugs based
on the employee's role.

✓ The members in higher roles can assign bugs to employees while those at lower levels can request access to / assignment of a particular bug.

✓ The status of the bugs is regularly updated in the following categories – Raised, Resolved, Threat Level, and Deadline of resolution.
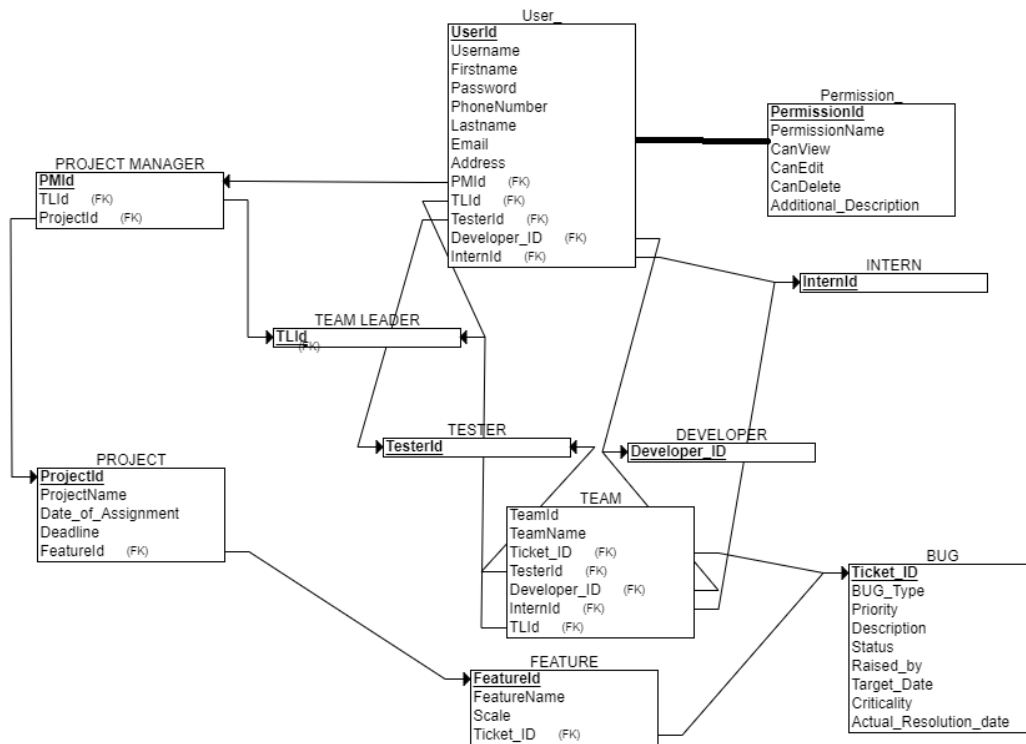
Assumpttions:

✓ Project contains Features.

✓ Project contains features and Features has bugs

✓ Developers and Testers report to their respective Team Leads and the team leads report to the Project Manager. The same is the Ascending hierarchy level for users.s

✓ User can be specialized into Developer, Tester, Intern, Team-Lead, Project Manager.

✓ Common attributes like First Name, Last Name, Username, Password, Address and Phone Number become part of Higher Entity i.e User and Special Attributes like Developer ID, Tester ID, Intern ID, TL ID and PM ID become part of their respective specialized entities.

✓ Project Manager handles multiple teams. So, Reporting is a One-Many relationships.

✓ Each Team Lead can lead only one team. So, Manages is a One-One relationship.

✓ Each team contains atmost 2 developers, 2 interns, and 1 tester.

✓ Bugs will be allotted to teams handling the respective Feature in which the defect was raised.

✓ Each bug can be allotted to multiple teams. So, Allotment is one-many relationship.

- **Resources on Specialization can be found here**

ER Diagram:

Relational Schema:

User_
- UserId
- Username
- Firstname
- Password
- PhoneNumber
- Lastname
- Email
- Address
- PMId (FK)
- TLId (FK)
- TesterId (FK)
- Developer_ID (FK)
- InternId (FK)

Permission_
- PermissionId
- PermissionName
- CanView
- CanEdit
- CanDelete
- Additional_Description

PROJECT MANAGER
- PMId
- TLId (FK)
- ProjectId (FK)

TEAM LEADER
- TLId (FK)

INTERN
- InternId

TESTER
- TesterId

DEVELOPER
- Developer_ID

PROJECT
- ProjectId
- ProjectName
- Date_of_Assignment
- Deadline
- FeatureId (FK)

TEAM
- TeamId
- TeamName
- Ticket_ID (FK)
- TesterId (FK)
- Developer_ID (FK)
- InternId (FK)
- TLId (FK)

BUG
- Ticket_ID
- BUG_Type
- Priority
- Description
- Status
- Raised_by
- Target_Date
- Criticality
- Actual_Resolution_date

FEATURE
- FeatureId
- FeatureName
- Scale
- Ticket_ID (FK)

FUNCTIONAL DEPENDENCIES:

- Permission BCNF

  PermissionId ->
  PermissionName,CanView,CanEdit,CanDelete,Additional_Description

- User BCNF

  UserId ->
  Username,FirstName,LastName,Password,Address,Phonenumber

- ProjectManager BCNF

  PMId->UserId

- Project BCNF

  ProjectId->ProjectName,DateofAssignment,Deadline,PMId

- TeamLeader BCNF

  TLId->UserId,PMId

- Team BCNF

  TeamId->TeamName,TLId

- Developer BCNF

  DeveloperId->UserId,TeamId

- Tester BCNF

  TesterId->UserId,TeamId

-   Intern BCNF

  InternId->UserId,TeamId

- Feature BCNF

  FeatureId->FeatureName,Scale,ProjectId

- Bug BCNF

TicketId->Type,Priority,Criticality,RaisedBy,Description,Status,TargetDate,ActualResolutionDate,FeatureId

- Allotment 3NF

TeamId,TicketId -> DateofAssignment

TABLES CREATION:

PERMISSION_:

```
CREATE TABLE Permission_(PermissionId
varchar(6),PermissionName varchar(12),CanView
char,CanEdit char,CanDelete
char,Additional_Description varchar(50),

        PRIMARY KEY (PermissionId));
```

USER_:

```
CREATE TABLE User_(UserId varchar(6),Username
varchar(12),FirstName varchar(15),LastName
varchar(15),Email varchar(30), Password
varchar(100),PhoneNumber varchar(13),Address
varchar(100),PermissionId varchar(6),

                PRIMARY KEY (UserId),

                FOREIGN KEY (PermissionId)
REFERENCES
Permission_(PermissionId));
```

PROJECTMANAGER:

```
CREATE TABLE ProjectManager(PMId
varchar(6),UserId varchar(6),

                        PRIMARY KEY
(PMId),
```

```
                              FOREIGN KEY
(UserId) REFERENCES User_(UserId));
```

PROJECT:

```
CREATE TABLE Project_(ProjectId
varchar(6),ProjectName
varchar(15),Date_of_assignment date,Deadline
date,PMId varchar(6),
                    PRIMARY KEY (ProjectId),
                    FOREIGN KEY (PMId)
REFERENCES ProjectManager(PMId));
```

TEAMLEADER:

```
CREATE TABLE TeamLeader(TLId varchar(6),UserId
varchar(6),PMId varchar(6),
                    PRIMARY KEY (TLId),
                    FOREIGN KEY (UserId)
REFERENCES User_(UserId),
                    FOREIGN KEY (PMId)
REFERENCES ProjectManager(PMId));
```

TEAM:

```
CREATE TABLE Team(TeamId varchar(6),TeamName
varchar(15),TLId varchar(6),
                 PRIMARY KEY (TeamId),
                 FOREIGN KEY (TLId)
REFERENCES TeamLeader(TLId));
```

TESTER:

```sql
CREATE TABLE Tester(TesterId varchar(6),UserId
varchar(6),TeamId varchar(6),
                              PRIMARY KEY
(TesterId),
                              FOREIGN KEY (UserId)
REFERENCES User_(UserId),
                              FOREIGN KEY (TeamId)
REFERENCES Team(TeamId));
```

INTERN:

```sql
CREATE TABLE Intern(InternId varchar(6),UserId
varchar(6),TeamId varchar(6),
                              PRIMARY KEY
(InternId),
                              FOREIGN KEY (UserId)
REFERENCES User_(UserId),
                              FOREIGN KEY (TeamId)
REFERENCES Team(TeamId));
```

DEVELOPER:

```sql
CREATE TABLE Developer(DeveloperId
varchar(6),UserId varchar(6),TeamId
varchar(6),
                              PRIMARY KEY
(DeveloperId),
```

```
                        FOREIGN KEY (UserId)
REFERENCES User_(UserId),

                        FOREIGN KEY (TeamId)
REFERENCES Team(TeamId));
```

FEATURE:

```
CREATE TABLE Feature(FeatureId
varchar(6),FeatureName varchar(50),Scale_
int,ProjectId varchar(6),

                 PRIMARY KEY (FeatureId),

                 FOREIGN KEY (ProjectId)
REFERENCES Project_(ProjectId));
```

BUG:

```
 CREATE TABLE Bug(TicketId varchar(15),Type_
varchar(30),Priority_ int,Criticality
varchar(10),Raised_by varchar(6),Description
varchar(500),Status varchar(30),Target_date
date,Actual_resolution_date date,FeatureId
varchar(6),

                 PRIMARY KEY (TicketId),

                 FOREIGN KEY (FeatureId)
REFERENCES Feature(FeatureId),

                 FOREIGN KEY (Raised_by)
REFERENCES User_(UserId));
```

ALLOTMENT:

```
CREATE TABLE Allotment(TeamId
varchar(6),TicketId
varchar(6),Date_of_assignment date,
                        PRIMARY KEY
(TeamId,TicketId),
                        FOREIGN KEY (TeamId)
REFERENCES Team(TeamId),
                        FOREIGN KEY (TicketId)
REFERENCES Bug(TicketId));
```

INSERTIONS:

PERMISSION_:

```
insert into Permission_ values('745678','Team
Admin','N','N','N','Allowed to create teams
and change team member ');

insert into Permission_
values('745679','Viewer','Y','N','N','Allowed
to only analyse the bugs');

insert into Permission_
values('745680','Editor','Y','Y','N','Allowed
to view and edit the bugs information');

insert into Permission_ values('745681','Bug
Admin','Y','Y','Y','Allowed to create,report
and assign bugs');
```

```
insert into Permission_
values('745682','Resolver','Y','Y','N','Allowe
d to work on bug and resolve them');
```

```
select * from permission_;
```

	PERMISSIONID	PERMISSIONNAME	CANVIEW	CANEDIT	CANDELETE	ADDITIONAL_DESCRIPTION
1	745678	Team Admin	N	N	N	Allowed to create teams and change team member
2	745679	Viewer	Y	N	N	Allowed to only analyse the bugs
3	745680	Editor	Y	Y	N	Allowed to view and edit the bugs information
4	745681	Bug Admin	Y	Y	Y	Allowed to create,report and assign bugs
5	745682	Resolver	Y	Y	N	Allowed to work on bug and resolve them

USER_:

```
insert into User_
values('USR200','Prash@17','Prashanth','Gaur',
'prashanth17@gmail.com','$2a$06$89oTRLmp0ZX3d8
W1D/
uyLev1deV76pY02vbRrqrxAxteeMWLX3PXu','+9192345
92789','Krishna Niwas Bldg, Gokhale Road,
Maharastra','745678');
```

```
insert into User_
values('USR201','Malholtra@02','Anguri','Malho
tra','malhotra02@gmail.com','$2a$06$TXrVkl.z.8
7h.EMvoFV/auDA86U43MpRcaC/
wzrRAiucZhrrKWXDS','+904098668954','3/84
```

Valnai Colony,Marvey Road, Malad
(w),Telangana','745679');

insert into User_
values('USR202','Sant@77','Santhosh','Punja','
santhosh1977@gmail.com','$2a$06$/
GCHMsJgikSR2n2ObdISUeAUkFKxzvzjArF6wQbWdC3/
BUyCGcvJS','+913089912534','Jalaram Apts,
Kharkhar Wadi,
Thane(w),Mumbai,Gujarat','745678');

insert into User_
values('USR203','Bhrdwj@8','Bharadwaj','Dhule'
,'bharadwajdh8@gmail.com','$2a$06$NNHv4S643BPb
TmIQRlGu6OBK/
VY6is3Nh3dRdMjyzFOjA58AYyQgS','+919419833227',
'38, Rajwadkar Road, Nr Jain Temple, Colaba,
Punjab','745680');

insert into User_
values('USR204','Chkrvthi@45','Chakravarthi','
Acarya','chkrvarthiac45@gmail.com','$2a$06$Hks
/
sy4kpSmVvUV.8ztNd.hdVOPV7XCKmw5a5T.zJfVwSZ9fKe
V12','+917605678944','Krishna Niwas Bldg,
Gokhale Road, Maharastra','745681');

insert into User_
values('USR205','Chand@18','Chand','Kulkarni',
'chandkul82@gmail.com','$2a$06$QcidsiQ0Xl2oGih
0y.islOKQzmgclcsj3ppqAXxkIJsRBfGcuHxzS','+9165
62156148','Shop No.98, Staion Road, Staion
Road, TamilNadu','745680');

insert into User_
values('USR206','Adit@03','Aditya','Deshpande'
,'aditpande03@gmail.com','$2a$06$B7jHsMXix7xns
hV1w6DS/

eSQkia7JXGXwKNCLj.cLaMnu9wzPrvjG','+9179719337
35','Tumkur Main Rd, T Dasarahalli,
Karnataka','745682');

insert into User_
values('USR207','Preethi@20','Preethi','Gunjan
','preethignjn20@gmail.com','$2a$06$89oTRLm62g
0ZX3d8W1D/
uyLev1deV76pY02vbRrqrxAxteeMWLX3PXu','+9121218
43191','Diwas Niwas Bldg, Gokhale Road,
Telangana','745678');

insert into User_
values('USR208','Shnam@11','Sahana','Murali','
sahanamrli11@gmail.com','$2a$06$3YwspRLmD0eP68
94hqm21eVqpJFJpKdJ6BG4mBszYo8OPXEGbgikm','+916
455159330',' Opp Flyover Bridge, Kora Kendra,
Borivli (w), Odisha','745679');

insert into User_
values('USR209','Lavshtl@90','Lavanya','Sheeth
al','lavanyashtl90@gmail.com','$2a$06$LADAIqEP
eQe9AXkiilXBFOh7yH2/
HN.tLF3FuUWlE.oRPQSXNFHUW','+914586708114','Ra
opura, Kothi Bus Stand, Jharkhand','745682');

insert into User_
values('USR210','Riya@87','Riyanka','Manne','r
iyamanne87@gmail.com','$2a$06$GHh5RmAamZIm/
yNzfrxhk.8Vq3RA/
5UDEtfMNSWxSf7UygY6umWbK','+915646291659','
Kailash Darshan, Kennedi Bridge,
Kerala','745678');

insert into User_
values('USR211','Srujit@05','Srujit','Paul','s
rujitpaul05@gmail.com','$2a$06$sItJXigWCgOURbu
6GNaxhenOU6T/

FNMBioO0ddQ6Po2xdN6YkeO8C','+95625542646','2-
d, Eldorado, 112, N H Road,
MadhyaPradesh','745682');

insert into User_
values('USR212','Karkwl@49','Karunya','Kalwadk
ar','karunyak49@gmail.com','$2a$06$sItJXigWCgO
URbu6GNaxhenOU6T/
FNMBioO0ddQ6Po2xdN6YkeO8C','+919238291487','Gi
rnar, Tardeo Rd, Opp Film Center,,
Gujarath','745680');

insert into User_
values('USR213','Keerthi@90','Keerthi','Suresh
','keerthi14690@gmail.com','$2a$06$CF3vN.Gn97d
P61UPA968YuCbHHMbMY6R8JO1FxYNsGs/
e2XlkAASC','+915168592517',' P B No 9098,
Goregaon(East), Maharastra','745682');

insert into User_
values('USR214','Preethi@17','Preethi','Shetty
','preethi123@gmail.com','$268YuCbHHMbMY6PA968
YuCbHHMbMY6R8JO1FxYNsGs/
e2XlkAASC','+919231688951',' Ground Flr, 8,
Everest, Dattapada Rd, Lucknow','745682');

insert into User_
values('USR215','arun@singh','Arun','Singh','A
runsingh@gmail.com','$2Y6R8JO1FxYNsG968YuCbHHM
bMY6R8JO1FxYNsGs/e2XlkAASC','+918812592517','
1-r K N Complex, Raja Annamalai Road,
Maharastra','745682');

insert into User_
values('USR216','Kaivalya@31','Kavailya','Puti
n','putinsmart10@gmail.com','$2bHHMbMY6R8JO1Fx
YNsUPA968YuCbHHMbMY6R8JO1','+919234312567','

```sql
5-9, City Point, Opp Pratap Talkies,
Goa','745681');

insert into User_
values('USR217','Sownya@91','Sownya','Rajesh',
'sownyaraj32@gmail.com','$2a$06$CF3vN.Gn97dP61
UPA968YuCbHbHNsGs/e2XlkAASC','+919234592787','
B/3/5, Chhabra Indl Est, Shivaji
Nagar','745682');

insert into User_
values('USR218','Neeraj@c89','Neeraj','Chopra'
,'neeraj89@gmail.com','$27dP61UPA968YuCbHHMbMY
6R8JO1FxYNsGs/e2XlkAASC','+918790492517','
Ashirwad Building, Carnac Road, Ahemadabad
Street, UP','745682');

insert into User_
values('USR219','Vedant@nag','Vedant','Nagre',
'vedantnagre67@gmail.com','$2a$06$CF3vN.Gn9MY6
R8JO1FxYNsGs/e2XlkAASC','+919908592517','  P B
No 9098, Goregaon( East),
Maharastra','745679');


select * from User_;
```

TICKETID	TYPE_	PRIORITY_	CRITICALITY	RAISED_BY	DESCRIPTION	STATUS	TARGET_DATE	ACTUAL_RESOLUTION_DATE	FEATUREID
BUG001	PRODUCTION	9	NORMAL	USR202	This is a high priority production issue raised in the FE01 that is not allowing users to input data into the field FE01-FL287	IN-PROGRESS-DELAYED	10-05-22	(null)	FTR103
BUG002	DEVELOPEMENT	8	NORMAL	USR203	This is a Dev issue raised in the FE01 related to the field FE01-FL287	NOT STARTED-WAITING	20-05-22	(null)	FTR102
BUG003	TESTING	17	MEDIUM	USR213	Test Data provided is not apprporiate for testing the field FE01-FL287	IMMEDIATE ACTION REQUIRED	12-05-22	(null)	FTR202
BUG004	TESTING	2	LOW	USR214	Test Data provided is insufficient for FE01-FL287	IMMEDIATE ACTION REQUIRED	14-05-22	(null)	FTR101
BUG005	DEVELOPMENT	16	MEDIUM	USR216	Give proper comments to explain the function radixSort	COMPLETED	12-05-22	08-05-22	FTR101
BUG006	END USER	10	NORMAL	USR208	FT501 is down. Rollback the latest changes and revert to v2.3.112	COMPLETED	10-05-22	11-05-22	FTR202
BUG008	TESTING	21	HIGH	USR210	Test Data provided is insufficient for FE01-FL287	IMMEDIATE ACTION REQUIRED	20-05-22	(null)	FTR103
BUG009	PIPELINING	15	MEDIUM	USR218	Test Data provided is insufficient for FE01-FL287	IMMEDIATE ACTION REQUIRED	06-05-22	(null)	FTR102
BUG010	PIPELINING	3	LOW	USR205	Jenkins misconfiguration for FT3326	IMMEDIATE ACTION REQUIRED	12-05-22	(null)	FTR103
BUG051	PRODUCTION	2	LOW	USR217	This is a high priority production issue raised in the FE01 that is not allowing users to input data into the field FE01-FL287	IN PROGRESS-DELAYED	09-05-22	(null)	FTR201
BUG053	DEVELOPEMENT	18	MEDIUM	USR209	This is a Dev issue raised in the FE01 related to the field FE01-FL287	NOT STARTED-WAITING	20-05-22	(null)	FTR201
BUG054	TESTING	25	HIGH	USR211	Test Data provided is not apprporiate for testing the field FE01-FL287	IMMEDIATE ACTION REQUIRED	09-05-22	(null)	FTR202
BUG055	TESTING	8	NORMAL	USR211	Test Data provided is insufficient for FE01-FL287	COMPLETED	12-05-22	02-05-22	FTR101
BUG056	DEVELOPMENT	15	MEDIUM	USR218	Give proper comments to explain the function radixSort	IMMEDIATE ACTION REQUIRED	14-05-22	(null)	FTR103
BUG057	END USER	2	LOW	USR202	FT501 is down. Rollback the latest changes and revert to v2.3.112	COMPLETED	23-05-22	(null)	FTR103
BUG058	TESTING	26	HIGH	USR211	Test Data provided is insufficient for FE01-FL287	IMMEDIATE ACTION REQUIRED	21-05-22	(null)	FTR102
BUG059	PIPELINING	17	MEDIUM	USR210	Test Data provided is insufficient for FE01-FL287	IMMEDIATE ACTION REQUIRED	17-05-22	(null)	FTR102
BUG060	PIPELINING	25	HIGH	USR215	Jenkins misconfiguration for FT3326	IMMEDIATE ACTION REQUIRED	18-05-22	(null)	FTR101

PROJECTMANAGER:

```
insert into projectmanager
values('PJM001','USR207');
```

```
insert into projectmanager
values('PJM002','USR201');
```

```
select * from Projectmanager;
```

	PMID	USERID
1	PJM001	USR207
2	PJM002	USR201

PROJECT:

```
insert into Project_
values('PRJT01','StarBucks',DATE
'2022-03-10',DATE '2022-07-13','PJM001');
```

```
insert into Project_
values('PRJT02','BharathPay',DATE
'2022-02-21',DATE '2022-08-09','PJM002');
```

```
select * from Project_;
```

	PROJECTID	PROJECTNAME	DATE_OF_ASSIGNMENT	DEADLINE	PMID
1	PRJT01	StarBucks	10-03-22	13-07-22	PJM001
2	PRJT02	BharathPay	21-02-22	09-08-22	PJM002

TEAMLEADER:

```
insert into TeamLeader
values('TL101','USR202','PJM002');

insert into TeamLeader
values('TL102','USR205','PJM001');

insert into TeamLeader
values('TL103','USR206','PJM001');

insert into TeamLeader
values('TL104','USR208','PJM002');

insert into TeamLeader
values('TL105','USR209','PJM001');
```

```
select * from TeamLeader;
```

	TLID	USERID	PMID
1	TL101	USR202	PJM002
2	TL102	USR205	PJM001
3	TL103	USR206	PJM001
4	TL104	USR208	PJM002
5	TL105	USR209	PJM001

TEAM:

```
insert into Team
values('TM301','Technocrats','TL104');

insert into Team
values('TM302','RoninMafia','TL102');
```

```sql
insert into Team values('TM303','Techie
Prohets','TL101');

insert into Team
values('TM304','Creedorian','TL103');

insert into Team values('TM305','Mind
Benders','TL105');
```

```sql
select * from Team;
```

	TEAMID	TEAMNAME	TLID
1	TM301	Technocrats	TL104
2	TM302	RoninMafia	TL102
3	TM303	Techie Prohets	TL101
4	TM304	Creedorian	TL103
5	TM305	Mind Benders	TL105

DEVELOPER:

```sql
insert into Developer
values('DEV001','USR203','TM301');

insert into Developer
values('DEV002','USR204','TM301');

insert into Developer
values('DEV003','USR210','TM302');

insert into Developer
values('DEV004','USR211','TM304');
```

```
select * from Developer;
```

	DEVELOPERID	USERID	TEAMID
1	DEV001	USR203	TM301
2	DEV002	USR204	TM301
3	DEV003	USR210	TM302
4	DEV004	USR211	TM304

TESTER:

```
insert into Tester
values('TES001','USR214','TM301');

insert into Tester
values('TES002','USR213','TM302');

insert into Tester
values('TES003','USR212','TM303');

insert into Tester
values('TES004','USR216','TM304');

insert into Tester
values('TES005','USR215','TM305');


select * from Tester;
```

	TESTERID	USERID	TEAMID
1	TES001	USR214	TM301
2	TES002	USR213	TM302
3	TES003	USR212	TM303
4	TES004	USR216	TM304
5	TES005	USR215	TM305

INTERN:

```
insert into Intern
values('INT001','USR218','TM301');

insert into Intern
values('INT002','USR217','TM303');

insert into Intern
values('INT003','USR219','TM303');


select * from Intern;
```

	INTERNID	USERID	TEAMID
1	INT001	USR218	TM301
2	INT002	USR217	TM303
3	INT003	USR219	TM303

FEATURE:

```
INSERT INTO Feature VALUES('FTR101', 'Login
Page for Remote Desktop Access', 1000,
'PRJT01');
```

```
INSERT INTO Feature VALUES('FTR102', 'Jenkins
Continous Integration ', 1200, 'PRJT01');

INSERT INTO Feature VALUES('FTR103',
'Dashboard Page showing Analytics', 1000,
'PRJT01');

INSERT INTO Feature VALUES('FTR201', 'Login
Page for VPN', 700, 'PRJT02');

INSERT INTO Feature VALUES('FTR202',
'Connection Status Page', 500, 'PRJT02');


select * from Feature;
```

	FEATUREID	FEATURENAME	SCALE_	PROJECTID
1	FTR101	Login Page for Remote Desktop Access	1000	PRJT01
2	FTR102	Jenkins Continous Integration	1200	PRJT01
3	FTR103	Dashboard Page showing Analytics	1000	PRJT01
4	FTR201	Login Page for VPN	700	PRJT02
5	FTR202	Connection Status Page	500	PRJT02

BUG:

```
INSERT INTO Bug VALUES('BUG001', 'PRODUCTION',
09, 'NORMAL', 'USR202', 'This is a high
priority production issue raised in the FE01
that is not allowing users to input data into
the field FE01-FL287', 'IN-PROGRESS-
DELAYED',DATE '2022-05-10',null,'FTR103');

INSERT INTO Bug VALUES('BUG002',
'DEVELOPEMENT', 08, 'NORMAL', 'USR203', 'This
is a Dev issue raised in the FE01 related to
```

the field FE01-FL287', 'NOT STARTED-WAITING',DATE '2022-05-20',null,'FTR102');

INSERT INTO Bug VALUES('BUG003', 'TESTING', 17, 'MEDIUM', 'USR213', 'Test Data provided is not apprporiate for testing the field FE01-FL287', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-12',null,'FTR202');

INSERT INTO Bug VALUES('BUG004', 'TESTING', 02, 'LOW', 'USR214', 'Test Data provided is insufficient for FE01-FL287', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-14',null,'FTR101');

INSERT INTO Bug VALUES('BUG005', 'DEVELOPMENT', 16, 'MEDIUM', 'USR216', 'Give proper comments to explain the function radixSort', 'COMPLETED',DATE '2022-05-12',DATE '2022-05-08','FTR101');

INSERT INTO Bug VALUES('BUG006', 'END_USER', 10, 'NORMAL', 'USR208', 'FT501 is down. Rollback the latest changes and revert to v2.3.112', 'COMPLETED',DATE '2022-05-10',DATE '2022-05-11', 'FTR202');

INSERT INTO Bug VALUES('BUG008', 'TESTING', 21, 'HIGH','USR210', 'Test Data provided is insufficient for FE01-FL287', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-20',null,'FTR103');

INSERT INTO Bug VALUES('BUG009', 'PIPELINING', 15, 'MEDIUM', 'USR218', 'Test Data provided is insufficient for FE01-FL287', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-06',null,'FTR102');

INSERT INTO Bug VALUES('BUG010', 'PIPELINING',03 ,'LOW', 'USR205', 'Jenkins misconfiguration for FT3326', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-12',null,'FTR103');

INSERT INTO Bug VALUES('BUG051', 'PRODUCTION', 02, 'LOW', 'USR217', 'This is a high priority production issue raised in the FE01 that is not allowing users to input data into the field FE01-FL287', 'IN PROGRESS-DELAYED',DATE '2022-05-09',null,'FTR201');

INSERT INTO Bug VALUES('BUG053', 'DEVELOPEMENT', 18, 'MEDIUM','USR209', 'This is a Dev issue raised in the FE01 related to the field FE01-FL287', 'NOT STARTED-WAITING',DATE '2022-05-20',null,'FTR201');

INSERT INTO Bug VALUES('BUG054', 'TESTING',25 , 'HIGH', 'USR211', 'Test Data provided is not apprporiate for testing the field FE01-FL287', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-09',null,'FTR202');

INSERT INTO Bug VALUES('BUG055', 'TESTING', 08, 'NORMAL','USR211', 'Test Data provided is insufficient for FE01-FL287', 'COMPLETED',DATE '2022-05-12',DATE '2022-05-02','FTR101');

INSERT INTO Bug VALUES('BUG056', 'DEVELOPMENT', 15, 'MEDIUM', 'USR218', 'Give proper comments to explain the function radixSort', 'IMMEDIATE ACTION REQUIRED',DATE '2022-05-14',null,'FTR103');

INSERT INTO Bug VALUES('BUG057', 'END_USER', 02, 'LOW', 'USR202', 'FT501 is down. Rollback

```
the latest changes and revert to v2.3.112',
'COMPLETED',DATE '2022-05-23',null, 'FTR103');

INSERT INTO Bug VALUES('BUG058', 'TESTING',
26, 'HIGH', 'USR211', 'Test Data provided is
insufficient for FE01-FL287', 'IMMEDIATE
ACTION REQUIRED',DATE
'2022-05-21',null,'FTR202');

INSERT INTO Bug VALUES('BUG059', 'PIPELINING',
17, 'MEDIUM', 'USR210', 'Test Data provided is
insufficient for FE01-FL287', 'IMMEDIATE
ACTION REQUIRED',DATE
'2022-05-17',null,'FTR102');

INSERT INTO Bug VALUES('BUG060',
'PIPELINING',25 , 'HIGH', 'USR215', 'Jenkins
misconfiguration for FT3326', 'IMMEDIATE
ACTION REQUIRED',DATE
'2022-05-18',null,'FTR101');
```

```
select * from Bug;
```

ALLOTMENT:

```
insert into Allotment
values('TM301','BUG001',DATE '2022-04-12');

insert into Allotment
values('TM302','BUG002',DATE '2022-05-01');
```

```
insert into Allotment
values('TM301','BUG003',DATE '2022-04-11');

insert into Allotment
values('TM303','BUG004',DATE '2022-04-28');

insert into Allotment
values('TM302','BUG005',DATE '2022-04-13');

insert into Allotment
values('TM302','BUG006',DATE '2022-04-04');

insert into Allotment
values('TM304','BUG008',DATE '2022-04-16');

insert into Allotment
values('TM305','BUG009',DATE '2022-04-01');

insert into Allotment
values('TM301','BUG010',DATE '2022-04-12');

insert into Allotment
values('TM304','BUG051',DATE '2022-04-19');

insert into Allotment
values('TM305','BUG053',DATE '2022-04-18');

insert into Allotment
values('TM303','BUG054',DATE '2022-04-21');

insert into Allotment
values('TM304','BUG055',DATE '2022-04-04');

insert into Allotment
values('TM304','BUG056',DATE '2022-04-26');

insert into Allotment
values('TM303','BUG057',DATE '2022-04-28');

insert into Allotment
values('TM305','BUG058',DATE '2022-04-03');

insert into Allotment
values('TM302','BUG059',DATE '2022-04-06');
```

```
insert into Allotment
values('TM301','BUG060',DATE '2022-04-18');
```

```
select * from Allotment;
```

	TEAMID	TICKETID	DATE_OF_ASSIGNMENT
1	TM301	BUG001	12-04-22
2	TM302	BUG002	01-05-22
3	TM301	BUG003	11-04-22
4	TM303	BUG004	28-04-22
5	TM302	BUG005	13-04-22
6	TM302	BUG006	04-04-22
7	TM304	BUG008	16-04-22
8	TM305	BUG009	01-04-22
9	TM301	BUG010	12-04-22
10	TM304	BUG051	19-04-22
11	TM305	BUG053	18-04-22
12	TM303	BUG054	21-04-22
13	TM304	BUG055	04-04-22
14	TM304	BUG056	26-04-22
15	TM303	BUG057	28-04-22
16	TM305	BUG058	03-04-22
17	TM302	BUG059	06-04-22
18	TM301	BUG060	18-04-22

SQL Views:

```
CREATE VIEW listBugs AS

SELECT ticketid, type_, description

FROM bug
```

TICKETID	TYPE_	DESCRIPTION
BUG001	PRODUCTION	This is a high priority production issue raised in the FE01 that is not allowing users to input data into the field FE01-FL287
BUG002	DEVELOPEMENT	This is a Dev issue raised in the FE01 related to the field FE01-FL287
BUG003	TESTING	Test Data provided is not apprporiate for testing the field FE01-FL287
BUG004	TESTING	Test Data provided is insufficient for FE01-FL287
BUG005	DEVELOPMENT	Give proper comments to explain the function radixSort
BUG006	END USER	FT501 is down. Rollback the latest changes and revert to v2.3.112
BUG008	TESTING	Test Data provided is insufficient for FE01-FL287
BUG009	PIPELINING	Test Data provided is insufficient for FE01-FL287
BUG010	PIPELINING	Jenkins misconfiguration for FT3326
BUG051	PRODUCTION	This is a high priority production issue raised in the FE01 that is not allowing users to input data into the field FE01-FL287
BUG053	DEVELOPEMENT	This is a Dev issue raised in the FE01 related to the field FE01-FL287
BUG054	TESTING	Test Data provided is not apprporiate for testing the field FE01-FL287
BUG055	TESTING	Test Data provided is insufficient for FE01-FL287
BUG056	DEVELOPMENT	Give proper comments to explain the function radixSort
BUG057	END USER	FT501 is down. Rollback the latest changes and revert to v2.3.112
BUG058	TESTING	Test Data provided is insufficient for FE01-FL287
BUG059	PIPELINING	Test Data provided is insufficient for FE01-FL287
BUG060	PIPELINING	Jenkins misconfiguration for FT3326

```
CREATE VIEW FeatureswithTestingBugs AS

SELECT FEATURENAME FROM FEATURE

WHERE FEATUREID IN (

    select FeatureId from bug

    where bug.type_ = 'TESTING'

);
```

	FEATURENAME
1	Login Page for Remote Desktop Access
2	Dashboard Page showing Analytics
3	Connection Status Page

```
CREATE VIEW FeatureswithProductionBugs AS

SELECT FEATURENAME FROM FEATURE

WHERE FEATUREID IN (

    select FeatureId from bug

    where bug.type_ = 'PRODUCTION'
```

```
);
```

	FEATURENAME
1	Dashboard Page showing Analytics
2	Login Page for VPN

```
Create view TeamIdofHighPriorityBugs as

select TeamID from Allotment where TicketID in
(select TicketId from bug where criticality =
'HIGH');
```

	TEAMID
1	TM304
2	TM303
3	TM305
4	TM301

create view HPDevs as

```
select firstname, lastname from user_ where
userid in (

 select userid from Developer where teamId in
(

        select * from TeamIdofHighPriorityBugs

    )

);
```

	FIRSTNAME	LASTNAME
1	Bharadwaj	Dhule
2	Chakravarthi	Acarya
3	Srujit	Paul