
GROUP ID:-16

BUG MANAGEMENT SYSTEM

Group Representative:-

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Queries

1) List all the bugs reported by customers.

```
select * from bug_details
```

```
where type='Customer Bug' or type='Enhancement Request';
```

	bug_id [PK] integer	reporter_id character varying (10)	project_id integer	bug_title character varying (70)	bug_description text
1	1001	C103	302	Application error coming in cart	When 5 products are added to cart application error is coming
2	1002	C102	301	Blank screen coming when submit is clicked	When user clicks submit an blank screen is coming and not con
3	1003	C112	311	Page layout changes when zoom out	When dimensions are changed the entire layout messes up
4	1004	C101	300	Users gets logged out after 2 mins	Any user staying logged in for more then 2 mins gets session ex
5	1005	C102	301	Logout button not present on every page	After home page logout button is not coming on some pages
6	1006	C106	305	Submit button does nothing	Data not getting submitted
7	1007	C107	306	Add reorder functionality	Once the customer orders something, he/she can reorder the sa
8	1009	C109	308	Launching app increasing sound automatically	The app increases the sound of device even though user has ke
9	1010	C115	314	Blank screen coming when submit is clicked	When user clicks submit an blank screen is coming and not con
10	1012	C111	310	Page layout changes when zoom out	When dimensions are changed the entire layout messes up
11	1014	C105	304	Application not launching	App keeps on closing as soon as launched
12	1015	C116	315	Page layout changes when zoom out	When dimensions are changed the entire layout messes up
13	1016	C102	321	Ui not compatible with tablet	When app launched in ipad the ui is not coming proper

	bug_id [PK] integer	reporter_id character varying (10)	project_id integer	bug_title character varying (70)	bug_description text
13	1016	C102	321	Ui not compatible with tablet	When app launched in ipad the ui is not coming proper
14	1017	C101	320	Ui not compatible with tablet	When app launched in ipad the ui is not coming proper
15	1018	C110	309	Add manage department functionality	Functionality to manage department needs to be added
16	1020	C119	318	Permissions error	iOS giving file sharing permission error
17	1021	C113	312	Unresponsive when searching something	When common words searched website becomes unresponsive
18	1022	C114	313	SCM block giving application error	SCM module keeps on giving errors at every page.
19	1024	C104	303	Change UI to support mobile responsive	Update the website to support mobile responsive
20	1026	C101	320	Add reorder functionality	Once the customer orders something, he/she can reorder the sa
21	1027	C120	319	Application not launching	App keeps on closing as soon as launched
22	1028	C115	314	Orders placed not coming in my orders	Orders placed by the customer not showing in my orders to trac
23	1029	C119	318	Add support for multi user access	Add support for multi user access
24	1030	C103	322	Server crash error	Submitting any flow is giving server crash error
25	1031	C104	323	Login not working	With correct username and password login fails
26	1032	C105	324	Change in toolbaar ui	Toolbar ui needs to be reordered

2) Give bug count for each project.

```
select bd.project_id,p.project_name,count(bd.project_id) as BugsonProject
from bug_details as bd
join projects as p
on bd.project_id=p.project_id
group by bd.project_id,p.project_name
order by project_id;
```

	project_id integer	project_name character varying (50)	bugsonproject bigint
1	300	Abhishilk Ecom Website	1
2	301	ScrumBees Online Shopping	2
3	302	Tranquil Software ERP	2
4	303	Collabera Home Website	3
5	304	Compucare Ecom app	1
6	305	Rishabh HealthIn App	1
7	306	Byte Grafix Online shopping	1
8	307	RadixWeb Studies	1
9	308	Silicon IT Meetings	1
10	309	Imfitech IT Solutions ERP	3
11	310	OneClick IT Info Website	1
12	311	Elsener Technologies Warehouse site	1
13	312	Argusoft IT HCM	1
14	313	Intelliware Development ERP	3
15	314	iQlaunce Solutions Online shopping	2
16	315	Konverg Digital Business Analysis	1

3) Give customers details who reported high priority bug (severity is 1).

select customer_id,customer_name

from customer

where customer_id in (

select reporter_id

from bug_details

where severity=1 and (type='Customer Bug' or type='Enhancement request'));

	Data Output	Explain	Messages	Notifications
	customer_id [PK] character varying (10)	customer_name character varying (50)		
1	C103	Team Tranquil Software Solutions Pvt Ltd		
2	C105	Compucare India		
3	C106	Rishabh Software		
4	C120	Root Quotient		
5	C114	Intelliware Development		
6	C104	Collabera Technologies Pvt Ltd		

4) Find the bug which required the most number of fixes.

```

select bug_id, count(*) as NumberofPatches
from patch_details
group by bug_id
having count(*) in(
select max(NumberofPatches) as NumberofPatches
from
(select bug_id, count(*) as NumberofPatches
from patch_details
group by bug_id) as countingmax);

```

	bug_id integer	numberofpatches bigint
1	1009	2

5) Give details about the team that worked on bugs reported by customer 'ScrumBees Technologies'.

```

select distinct teams.team_id, teams.team_name
from teams
join patch_details
on teams.team_id=patch_details.team_id

```

```

join bug_details
on patch_details.bug_id=bug_details.bug_id
join customer on bug_details.reporter_id=customer.customer_id
where customer.customer_name='ScrumBees Technologies';

```

	team_id [PK] character varying (10)	team_name character varying (50)
1	T01	Dev Team 1
2	T02	Dev Team 2
3	T08	Senoir Dev Team 2

6) Count the number of bus fixed before any date.

```

select count(bug_details.bug_id) as "Number of Bugs Fixed Before 2020-04-21"
from bug_details
join patch_details
on bug_details.bug_id=patch_details.bug_id
where (bug_details.status='Fixed' or bug_details.status='Closed') and patch_details.patch_date
< '2020-04-21';

```

	Number of Bugs Fixed Before 2020-04-21 bigint
1	23

7) Give customer details which reported bugs as well as enhancements.

```
select customer_id,customer_name
from customer
where customer_id in
(
select reporter_id
from bug_details
where type='Customer Bug'
intersect
select reporter_id
from bug_details
where type='Enhancement Request'
)
order by customer_id;
```

	customer_id [PK] character varying (10)	customer_name character varying (50)
1	C101	Abhishilk IT
2	C102	ScrumBees Technologies
3	C104	Collabera Technologies Pvt Ltd
4	C105	Compucare India
5	C110	Imfitech IT Solutions
6	C119	Ducen Infotech

8) Give details of top 3 team (including employee name and their manager) which fixed most number of bugs.

```
select teams.team_id,teams.team_name,y.employee_name as
TeamLead,e.employee_id,e.employee_name,department.department_id,x.employee_name as
Manager
from teams
```

```

join employee e
on teams.team_id=e.team_id
join department
on department.department_id=teams.department_id
join employee x
on department.manager_id=x.employee_id
join employee y
on teams.team_lead_id=y.employee_id
where teams.team_id in (
select teams.team_id
from
( select team_id,count(*) as No_of_bugs_fixed
from patch_details
group by patch_details.team_id
order by No_of_bugs_fixed desc
limit 3
) pd
join teams
on teams.team_id=pd.team_id)
order by team_id;

```

	team_id character varying (10)	team_name character varying (50)	teamlead character varying (50)	employee_id character varying (10)	employee_name character varying (50)	department_id character varying (10)	manager character varying (50)
1	T02	Dev Team 2	Mahek Patel	E114	Richa Joshi	D101	Nikhil Singh
2	T02	Dev Team 2	Mahek Patel	E102	Mahek Patel	D101	Nikhil Singh
3	T02	Dev Team 2	Mahek Patel	E126	Jenish shah	D101	Nikhil Singh
4	T03	Senior Dev Team 1	Parth Thakkar	E115	Aastha Suthar	D101	Nikhil Singh
5	T03	Senior Dev Team 1	Parth Thakkar	E103	Parth Thakkar	D101	Nikhil Singh
6	T03	Senior Dev Team 1	Parth Thakkar	E127	Kalp Maheshwari	D101	Nikhil Singh
7	T12	Special dev team 2	Yash Trivedi	E108	Yash Trivedi	D101	Nikhil Singh
8	T12	Special dev team 2	Yash Trivedi	E132	Shalki Singh	D101	Nikhil Singh
9	T12	Special dev team 2	Yash Trivedi	E120	Harshil Modi	D101	Nikhil Singh

9) Give details of bugs which were reopened by the reporter.

```
select *
from bug_details
where bug_id in (
select patch_details.bug_id
from patch_details
group by bug_id
having count(*)>1
union
select patch_details.bug_id
from patch_details
natural join bug_details
where status='Open' or status='In-progress');
```

	bug_id [PK] Integer	reporter_id character varying (10)	project_id integer	bug_title character varying (100)	bug_description text	status character varying (20)	type character var
1	1009	C109	308	Launching app increasing sound automatically	The app increases the sound of device even though user has kept it on mute	Closed	Customer Bu
2	1027	C120	319	Application not launching	App keeps on closing as soon as launched	In-progress	Customer Bu

10) Give details of QA team (Employee names) which detected most number of bugs.

```
select e.employee_id,e.employee_name
from teams
join employee e
on teams.team_id=e.team_id
where teams.team_id=
(
select reporter_id
from bug_details
where type='QA Bug'
group by reporter_id
```



```

having count(*)=(
select max(Bugsreported) as Bugsreported
from(
select reporter_id,count(*) as Bugsreported
from bug_details
where type='QA Bug'
group by reporter_id)as Max));

```

	employee_id [PK] character varying (10)	employee_name character varying (50)
1	E140	Viren Kariya
2	E148	Dhruvi Chudhary
3	E156	Amey Patel

11) Find highest priority bug fixed the earliest.

```

select bug_details.bug_id,report_date,release_date,(release_details.release_date::date -
bug_details.report_date::date) AS DaysRequiredtoFixtheBug
from release_details
natural join patch_details
natural join bug_details
where (release_details.release_date::date - bug_details.report_date::date)=(
select MIN(release_details.release_date::date - bug_details.report_date::date)
from release_details
natural join patch_details
natural join bug_details);

```

	bug_id integer	report_date date	release_date date	daysrequiredtofixthebug integer
1	1005	2020-01-05	2020-01-10	5
2	1011	2020-01-25	2020-01-30	5
3	1026	2020-06-05	2020-06-10	5

12) Give project details with no bug reported within 30 days of release

```

select distinct
bug_details.project_id,projects.project_name,projects.team_id,projects.end_date as
ProjectEndedOn
from projects
join
bug_details
on bug_details.project_id=projects.project_id
where bug_details.project_id not in (
select bug_details.project_id
from bug_details
natural join projects
where bug_details.report_date between projects.end_date and (projects.end_date + integer
'30'))
and projects.end_date is not null;

```

	project_id integer	project_name character varying (50)	team_id character varying (10)	projectendedon date
1	317	Denologix Online Exam	T13	2020-02-15
2	320	Abhishilk Ecom App	T03	2019-12-01
3	309	Imfitech IT Solutions ERP	T01	2020-01-10
4	310	OneClick IT Info Website	T02	2019-12-30
5	324	Compucare Ecom app	T11	2020-03-02
6	303	Collabera Home Website	T08	2020-02-05
7	322	Tranquil Software ERP App	T09	2020-02-19
8	323	Collabera Sales	T10	2020-02-25
9	316	Synergy IT Product Catalouge	T12	2020-02-01
10	306	Byte Grafix Online shopping	T11	2019-12-20
11	304	Compucare Ecom app	T09	2020-01-19
12	307	RadixWeb Studies	T12	2020-02-01

13) Give month wise number of bugs were logged in year 2020.

```

select extract(month from bug_details.report_date) as Month_Num, count(*) as bugsreported
from bug_details
where report_date::text like '2020%'
group by Month_num
order by extract(month from bug_details.report_date);

```

	month_num double precision	bugsreported bigint
1	1	8
2	2	6
3	3	5
4	4	2
5	6	4
6	7	1
7	8	7

14) How many bugs were logged for a specific project type?

```
select projects.project_type,count(*) as "NumberofBugs"
from patch_details
join
bug_details
on patch_details.bug_id=bug_details.bug_id
join projects
on projects.project_id=bug_details.project_id
group by project_type
order by count(*);
```

	Data Output	Explain	Messages	Notif
	project_type character varying (20)		NumberofBugs bigint	
1	IOS App		6	
2	Android App		7	
3	Website		15	

15) Find all the teams who have worked on more patches then average number of patches.

```
select * from teams where team_id in
(select team_id from patch_details group by team_id having count(patch_id) >
(select avg(team_patch_counts) as team_avg_patch from (select count(patch_id)
as team_patch_counts from patch_details group by team_id order by team_id asc) Z))
```

	team_id [PK] character varying (1)	team_name character varying (50)	department_id character varying (10)	team_lead_id character varying (10)
1	T02	Dev Team 2	D101	E102
2	T03	Senior Dev Team 1	D101	E103
3	T08	Senior Dev Team 2	D101	E104
4	T10	Senior Dev Team 3	D101	E106
5	T12	Special dev team 2	D101	E108

16)Fetch top 3 bugs reported from customers coming from a specific city.

```

select customer.city,count(*) as NumberofCustomers
from customer
where customer_id in
(select reporter_id
from bug_details
)
group by customer.city
order by NumberofCustomers
limit 3;

```

	city character varying (20)	numberofcustomers bigint
1	Ahmedabad	2
2	Victoria	2
3	Austin	1

17)List down details of project updates and the team that worked on its release.

```

select
update_details.project_id,update_details.version_id,patch_details.team_id,projects.project_name,projects.project_type
from update_details
natural join release_details

```

natural join patch_details

join bug_details

on patch_details.bug_id=bug_details.bug_id

join projects

on bug_details.project_id=projects.project_id

order by project_id,version_id;

	project_id integer	version_id integer	team_id character varying (10)	project_name character varying (50)	project_type character varying (30)
1	300	1002	T01	Abhishilk Ecom Website	Website
2	301	1000	T08	ScrumBees Online Shopping	Website
3	301	1003	T02	ScrumBees Online Shopping	Website
4	303	1020	T13	Collabera Home Website	Website
5	303	1020	T12	Collabera Home Website	Website
6	304	1012	T17	Compucare Ecom app	Android App
7	305	1004	T03	Rishabh HealthIn App	Android App
8	306	1009	T08	Byte Grafix Online shopping	Android App
9	307	1005	T09	RadixWeb Studios	Android App
10	308	1007	T10	Silicon IT Meetings	Android App
11	308	1023	T02	Tranquil Software ERP	Website
12	309	1013	T03	Imfitech IT Solutions ERP	Android App
13	309	1013	T08	Imfitech IT Solutions ERP	Android App
14	310	1011	T13	OneClick IT Info Website	Website

18) Find the projects with more updates than the average total updates.

select project_id,count(*) as Projectswithupdatesmorethanaverage

from update_details

group by project_id

having count(*)>(

select avg(cnt) as avgtotalupdates

from(

select count(*) as cnt

from update_details

group by project_id)as AVERAGE)

order by project_id;

	project_id integer	projectswithupdatesmorethanaverage bigint
1	301	2
2	308	2
3	320	2

19) Give team details which fixed all types of bug.

```

select *
from teams
where team_id in (
select patch_details.team_id
from patch_details
natural join bug_details
where bug_details.type='QA Bug'
intersect
select patch_details.team_id
from patch_details
natural join bug_details
where bug_details.type='Customer Bug'
intersect
select patch_details.team_id
from patch_details
natural join bug_details
where bug_details.type='Enhancement Request'
intersect
select patch_details.team_id
from patch_details
natural join bug_details
where bug_details.type='Development Bug');

```

	team_id [PK] character varying (10)	team_name character varying (50)	department_id character varying (10)	team_lead_id character varying (10)
1	T08	Senoir Dev Team 2	D101	E104

20) List down all the resolved bugs and their update release status.

```
select patch_details.bug_id,update_details.status
from update_details
natural join release_details
natural join patch_details
join bug_details
on patch_details.bug_id=bug_details.bug_id
join projects
on bug_details.project_id=projects.project_id
where bug_details.status='Fixed' or bug_details.status='Closed';
```

	bug_id integer	status character varying (20)
1	1002	Released
2	1003	Released
3	1004	Released
4	1005	Released
5	1006	Released
6	1011	Released
7	1009	Released
8	1013	Released

21) List down the project which had an update within 30 days of their release.

```
select project_id,project_name
from projects
where project_id in
(
    select update_details.project_id
    from update_details
    join projects
    on projects.project_id=update_details.project_id
    where (update_details.update_date::date-projects.end_date::date)<30
);
```

	project_id [PK] integer	project_name character varying (50)
1	300	Abhishilk Ecom Website
2	301	ScrumBees Online Shopping
3	305	Rishabh HealthIn App
4	307	RadixWeb Studies
5	311	Elsener Technologies Warehouse site
6	316	Synergy IT Product Catalouge
7	317	Denologix Online Exam
8	319	Root Quotient Solvelt