Group: RR3

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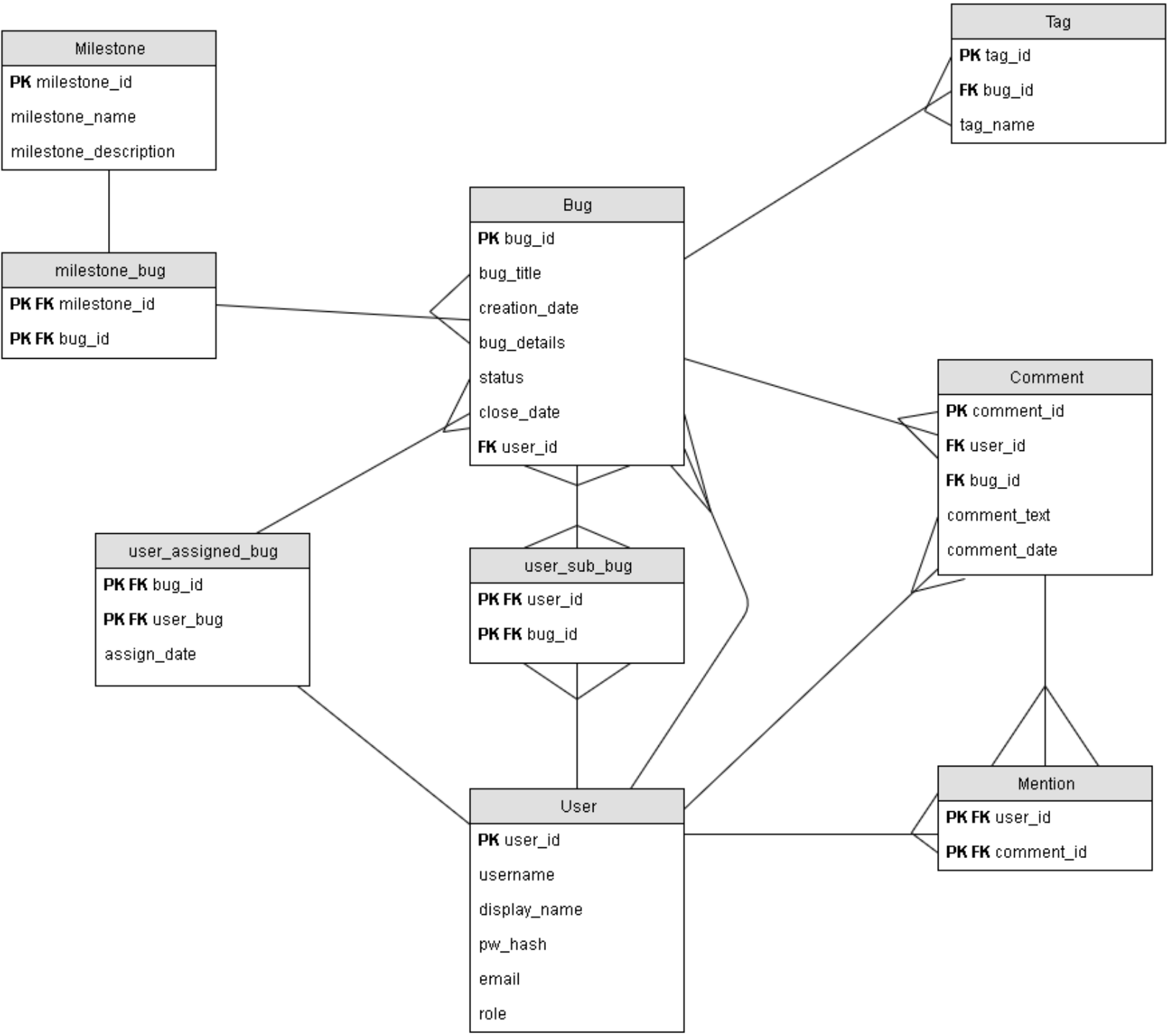
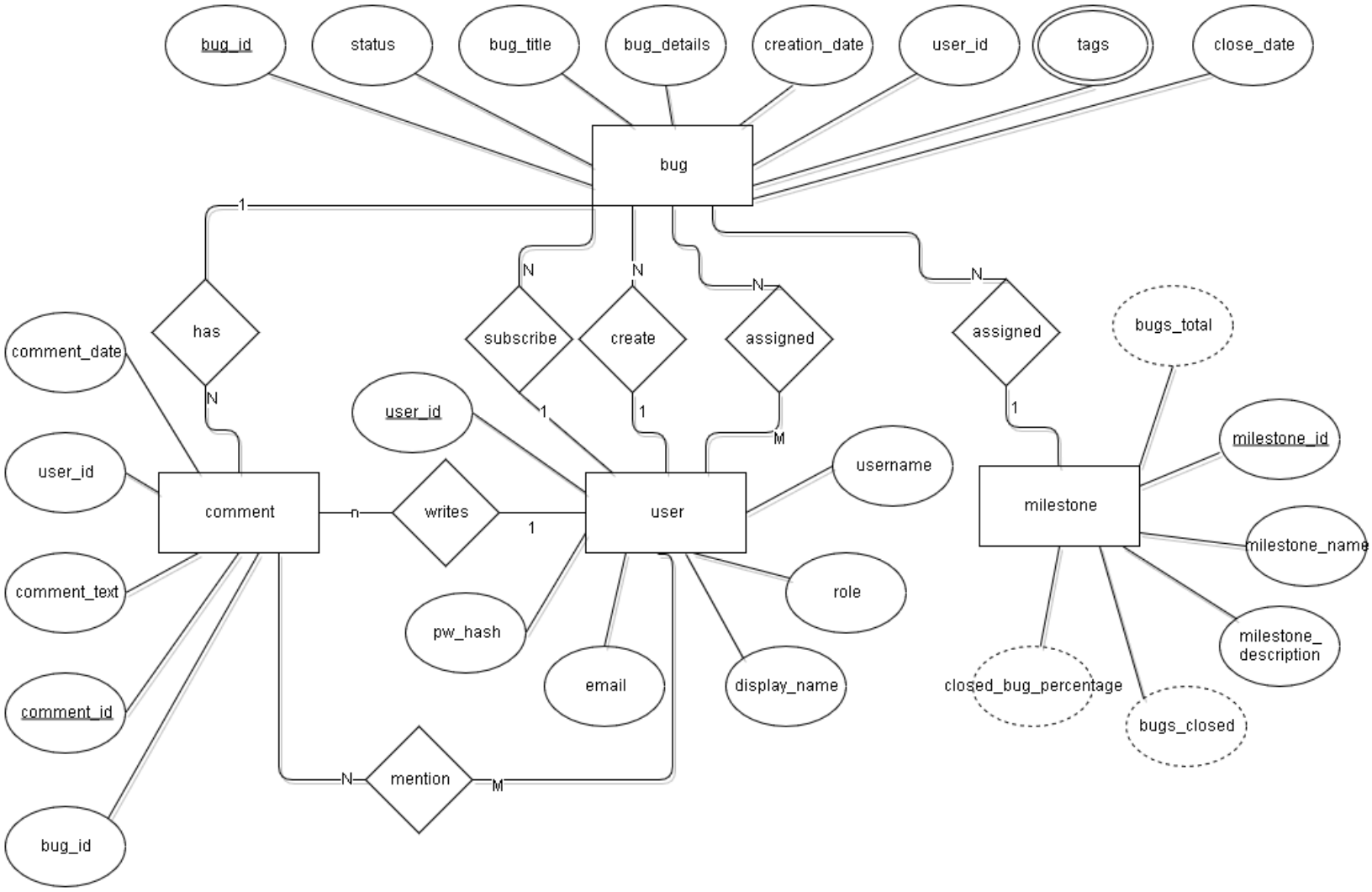
Instructions

To grade our project, you should click through all the links to try to use the basic functions and test the results to the database.

Physical Model



Entity-Relationship Diagram



Database DLL

```
create TABLE bug (
    bug_id integer not null default
nextval('bug_bug_id_seq'::regclass),
    bug_title varchar not null,
    creator_id integer not null,
    creation_date timestamp not null default now(),
    bug_details varchar default ''::character varying,
    status stat not null default 'open'::stat,
    close_date timestamp,
    PRIMARY KEY (bug_id),
    FOREIGN KEY (creator_id) REFERENCES "user" (user_id)
);
CREATE UNIQUE INDEX bug_pkey ON bug (bug_id);
CREATE UNIQUE INDEX bug_bug_title_key ON bug (bug_title)create
TABLE comment (
    comment_id integer not null default
nextval('comment_comment_id_seq'::regclass),
    author_id integer not null,
    bug_id integer not null,
    comment_text varchar not null,
    comment_date timestamp not null default now(),
    PRIMARY KEY (comment_id),
    FOREIGN KEY (author_id) REFERENCES "user" (user_id),
    FOREIGN KEY (bug_id) REFERENCES bug (bug_id)
);
CREATE UNIQUE INDEX comment_pkey ON comment (comment_id)create
TABLE mention (
    user_id integer not null,
    comment_id integer not null,
    PRIMARY KEY (user_id, comment_id),
    FOREIGN KEY (user_id) REFERENCES "user" (user_id),
    FOREIGN KEY (comment_id) REFERENCES comment (comment_id)
);
CREATE UNIQUE INDEX mention_pkey ON mention (user_id,
comment_id)create TABLE milestone (
    milestone_id integer not null default
nextval('milestone_milestone_id_seq'::regclass),
    milestone_name varchar not null,
    milestone_description varchar not null default ''::character
varying,
    PRIMARY KEY (milestone_id)
);
CREATE UNIQUE INDEX milestone_pkey ON milestone (milestone_id);
```

```
CREATE UNIQUE INDEX milestone_milestone_name_key ON milestone
(milestone_name)create TABLE tag (
    tag_id integer not null default
nextval('tag_tag_id_seq'::regclass),
    bug_id integer not null,
    tag_name varchar not null,
    PRIMARY KEY (tag_id),
    FOREIGN KEY (bug_id) REFERENCES bug (bug_id)
);
CREATE UNIQUE INDEX tag_pkey ON tag (tag_id)create TABLE "user"
(
    user_id integer not null default
nextval('user_user_id_seq'::regclass),
    username varchar not null,
    display_name varchar not null,
    pw_hash varchar not null,
    email varchar not null,
    role user_role not null default 'user'::user_role,
    PRIMARY KEY (user_id)
);
CREATE UNIQUE INDEX user_pkey ON "user" (user_id);
CREATE UNIQUE INDEX user_username_key ON "user" (username);
CREATE UNIQUE INDEX user_display_name_key ON "user"
(display_name);
CREATE UNIQUE INDEX user_email_key ON "user" (email)create TABLE
user_assigned_bug (
    user_id integer not null,
    bug_id integer not null,
    assign_date timestamp not null default now(),
    PRIMARY KEY (user_id, bug_id),
    FOREIGN KEY (user_id) REFERENCES "user" (user_id),
    FOREIGN KEY (bug_id) REFERENCES bug (bug_id)
);
CREATE UNIQUE INDEX user_assigned_bug_pkey ON user_assigned_bug
(user_id, bug_id)create TABLE user_sub_bug (
    user_id integer not null,
    bug_id integer not null,
    PRIMARY KEY (user_id, bug_id),
    FOREIGN KEY (user_id) REFERENCES "user" (user_id),
    FOREIGN KEY (bug_id) REFERENCES bug (bug_id)
);
CREATE UNIQUE INDEX user_sub_bug_pkey ON user_sub_bug (user_id,
bug_id);
```

Page Descriptions

PAGE	URL	DESCRIPTION	STATUS
Default	/	a user that isn't logged in can browse bugs and look at comments	finished
User splash page	/home/<user_id>	like the default page but takes user to user specific links	finished
Registration	/reg	Uses the user table, making a list of all the people that have registered.	finished
Login	/login	Uses the user table. Is where the users login so that they are able to make more bugs and comment on existing bugs.	finished
User profile	/user/<int:user_id>	The profile page of the user. Uses the user and bug table, so that people who visit the profile page can see what bugs they are a part of.	finished
Bug description	/bug/<int:bug_id>	Uses the bug, mention, comment, tag, and subscription tables.	finished
Bug user	/bug/<int:bug_id>/<int:user_id>	same as bug description but has subscribe link for user	finished
Bug Comments	/bug/<int:bug_id>/comments/<int:user_id>	page that has comments for bugs	finished
Subscribe	/bug/<int:bug_id>/<int:user_id>/<string:subscribed>	subscribes or unsubscribes a user from a bug	finished
Milestone list	/milestone	list of all the milestones	finished
Milestone	/milestone/<int:mile_id>	Uses the bug and milestone tables. Shows all the bugs associated with a certain milestone.	finished
Browse	/browse/<string:browse>/<string:filter>/	Uses the bug and user tables. Let's a user search for a specific bug or browse through the list of bugs.	finished
Search	/search/<string:text>	Lets user search for a string in a bug title or description	finished
User browse	/user_browse/<int:user_id>/<string:browse>/<string:status>/	lets user search bugs related to them	finished
Bug creation	/newbug	Uses the bug and user tables. Allows a user to create a new bug.	finished
Newsfeed	/newsfeed/user/<int:user_id>	Uses the bug, user, and subscribe tables. Is a place that shows all the bugs that someone is working on and what they may be subscribed to when they first happen.	finished

Mile-Stone Feature

The mile-stone feature will allow the users to track the progress of a bug. A mile-stone will be assigned a bug, meaning the mile-stone table will have a relationship with the bug table and a mile-stone can have multiple bugs. Mile-stone will look at its bugs' statuses to derive the number of closed bugs. A progress percentage can be derived by the number of closed bugs divided by the total number of bugs.