Department of Computer Science

Software Project Proposal, Summer 2021-22

Course	OBJECT ORIENTED PROGRAMMING 2	**Group No.**	

Student ID	Name	Section
21-44943-2	MD.ALAMIN HOSSEN	**K**

Project Title:

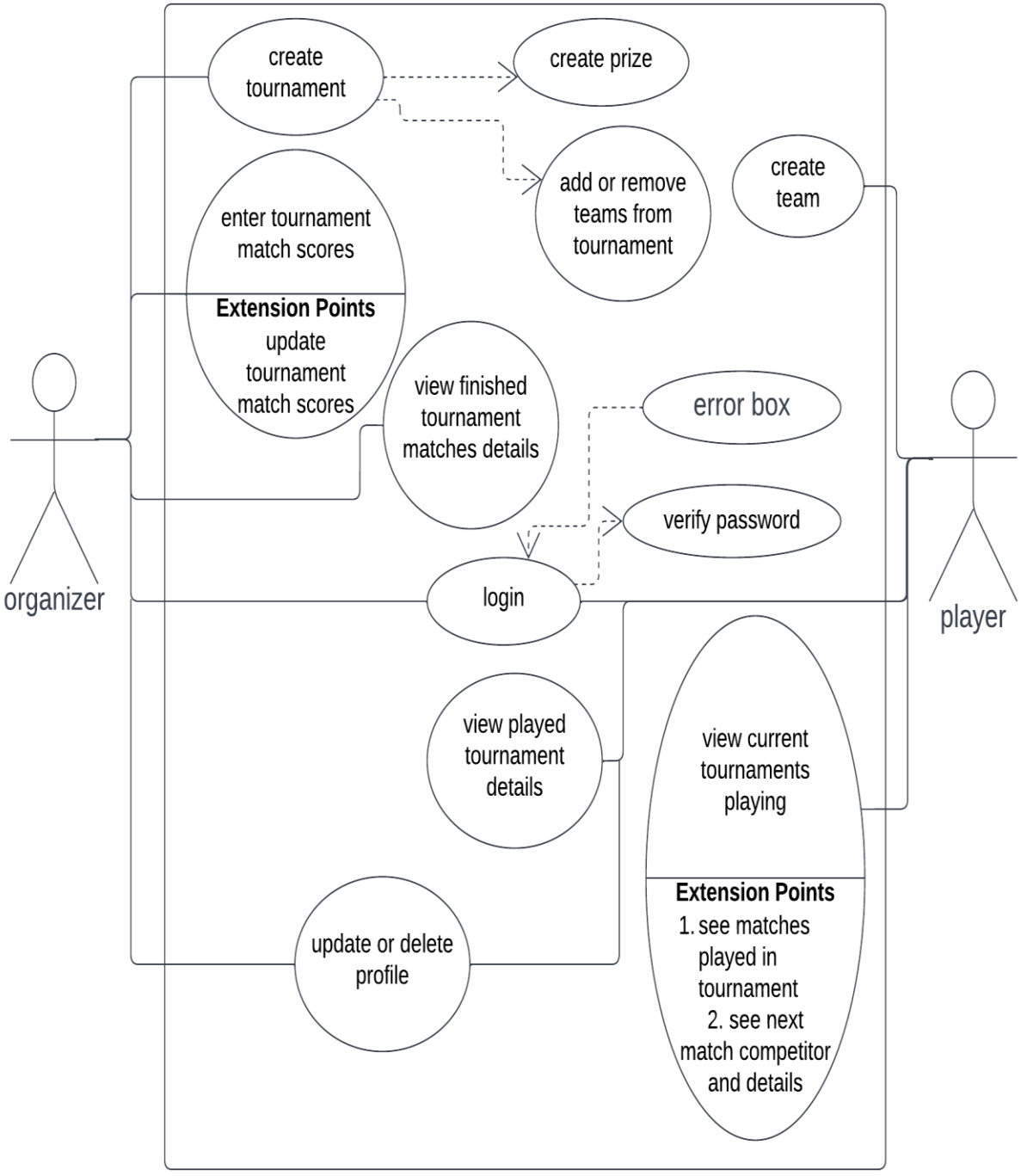
Tournament management system

Tournament management system

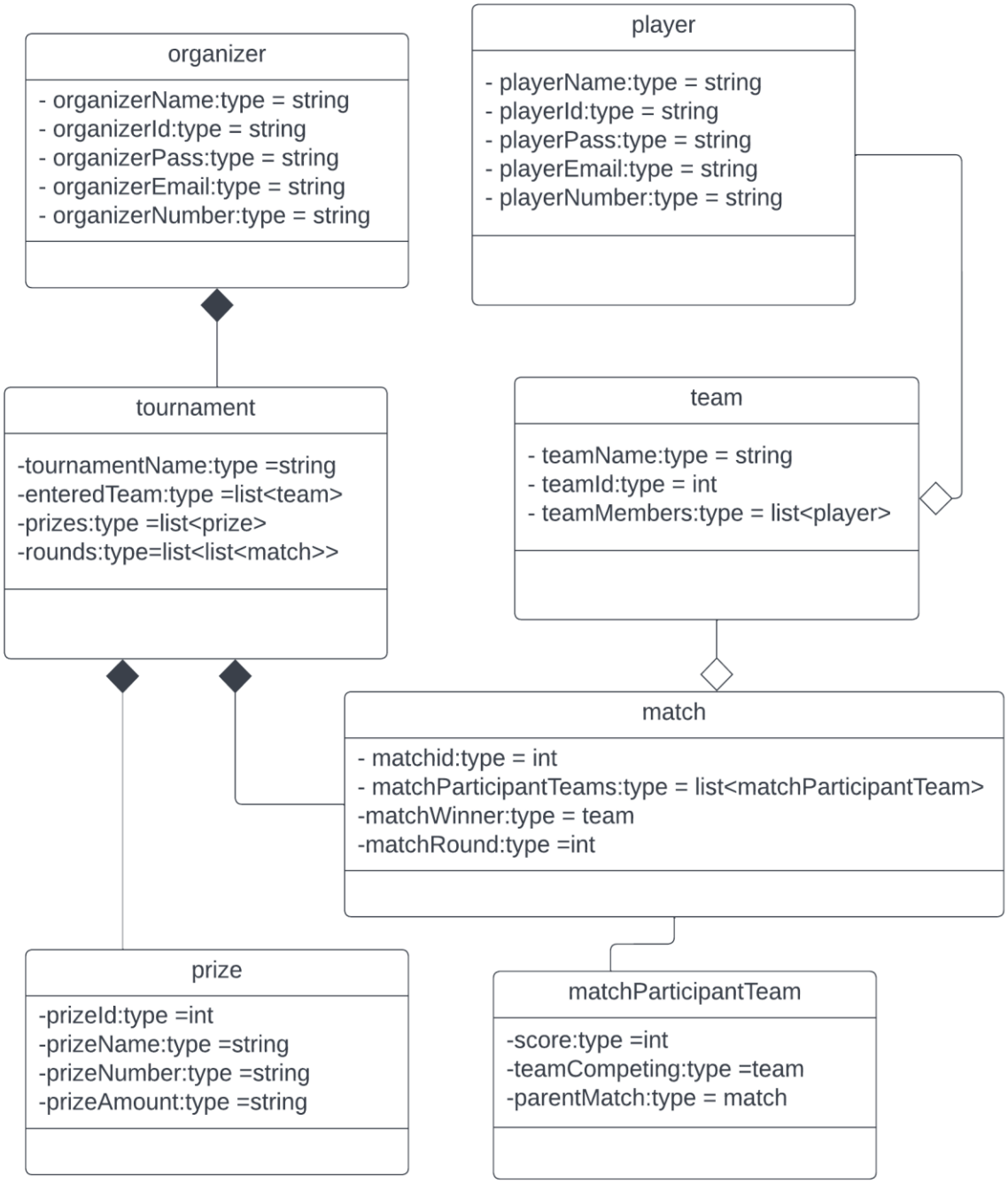
Project Description:

There are going to be two types of users one organizer and the second players. Players can create teams. Organizer can create tournaments, add or remove teams from tournament and create prizes when creating tournament. Depending on team number the round and its matchups will be randomly generated. Organizer will update each match scores. Players can see what tournaments they are part of with its match history and they can also see which round and which team they will play next. Organizer and players both can change their profile information. but only players can delete their accounts. After each match or tournament is over the winners will be notified and match history will be updated.

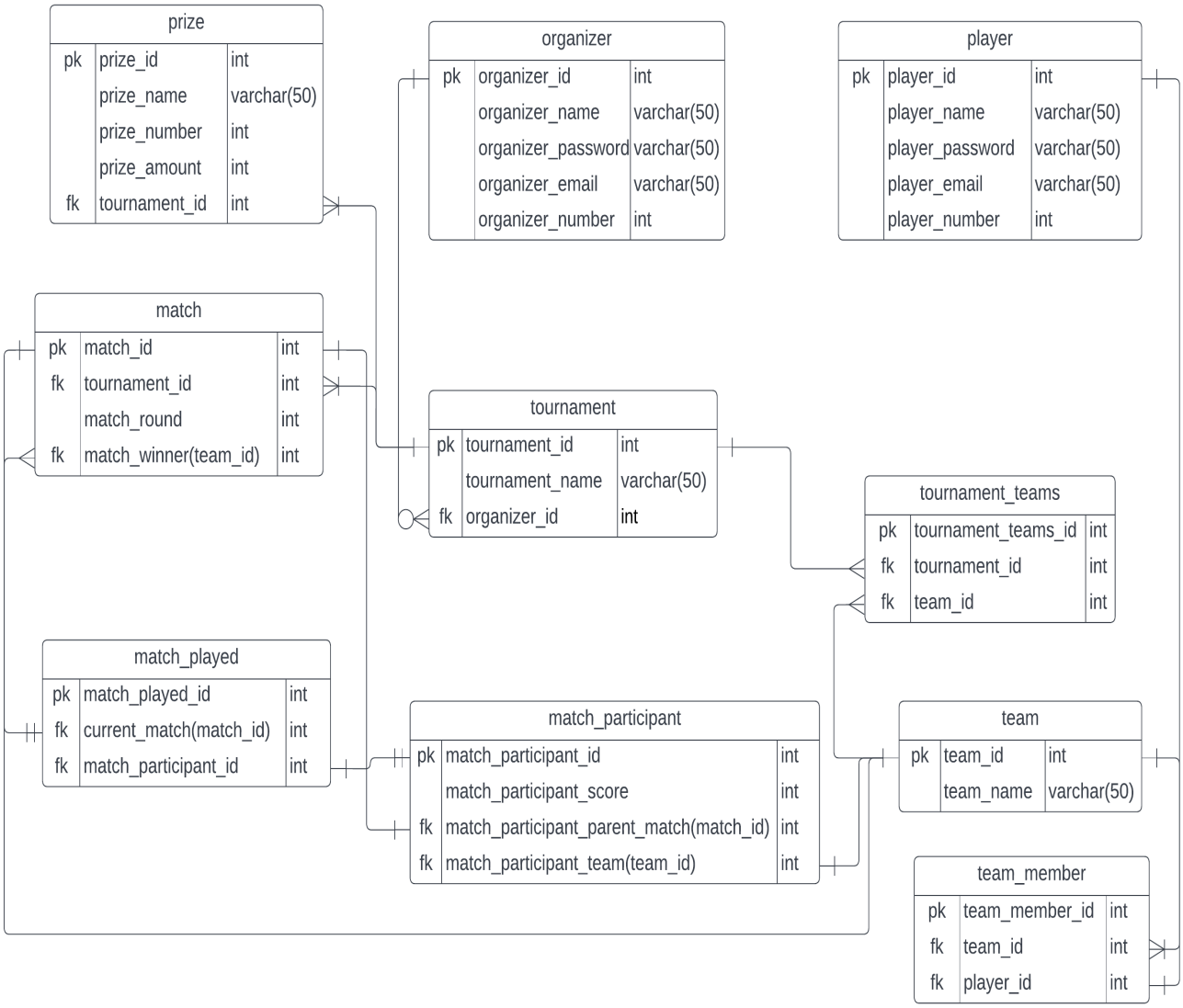
1. Use case diagram:



2.Class diagram:



3.ER diagram:


prize
pk prize_id int
prize_name varchar(50)
prize_number int
prize_amount int
fk tournament_id int
organizer
pk organizer_id int
organizer_name varchar(50)
organizer_password varchar(50)
organizer_email varchar(50)
organizer_number int
player
pk player_id int
player_name varchar(50)
player_password varchar(50)
player_email varchar(50)
player_number int
match
pk match_id int
fk tournament_id int
match_round int
fk match_winner(team_id) int
tournament
pk tournament_id int
tournament_name varchar(50)
fk organizer_id int
tournament_teams
pk tournament_teams_id int
fk tournament_id int
fk team_id int
match_played
pk match_played_id int
fk current_match(match_id) int
fk match_participant_id int
match_participant
pk match_participant_id int
match_participant_score int
fk match_participant_parent_match(match_id) int
fk match_participant_team(team_id) int
team
pk team_id int
team_name varchar(50)
team_member
pk team_member_id int
fk team_id int
fk player_id int