ASSIGNMENT 2

1. What does "equity" mean in the context of software engineering teams and why is it important in software engineering workplaces?

2. Why conducting blind hiring processes promotes equity in software engineering teams?

3. What was the main reason Google's image recognition system made serious classification mistakes?

4. Who discovered the mistakes in Google's image recognition system? Why internal testing at Google failed to detect the bias?

5. Explain haunting graveyard in code and why they are haunted?

6. Write short note on tribal knowledge.

7. Explain Googleness in Software Development.

8. Low bus factor is a red flag for project continuity. Explain with real life example.

9. Draw a use case diagram for a ticket distributor for a train system. The system includes two actors: a traveler, who purchases different types of tickets, and a central computer system, which maintains a reference database for the tariff. Use cases should include: BuyOneWayTicket, BuyWeeklyCard, BuyMonthlyCard, UpdateTariff. Also include the following exceptional cases: Time-Out (i.e., traveler took too long to insert the right amount), TransactionAborted (i.e., traveler selected the cancel button without completing the transaction), DistributorOutOfChange, and DistributorOutOfPaper.

10. Hans and Jacqueline live in Amsterdam; she is a pilot and he is a physician, both have a very busy schedule. To schedule their shopping and household activities, they develop software, Easy Shop, H & J (Hans and Jacqueline) Easy Shop. H&J should be able to enter their presence for meals for each day, to register invitations for guests for each meal to fix a menu for cold meals with given ingredients, to choose whether they will cook in their agenda, and if so, fix a recipe for each warm meal to prepare a weekly shopping list, and fax the shopping list to the supermarket for delivery, to keep track of ingredients in the kitchen; give a report when needed to show recipes (e.g., when cooking a dish).

Draw use case diagram and class diagram for the given problem.