University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 93

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Deliverables

All of the following items must be put together into a single PDF file.

1. A completed cover page (template on Canvas)
2. A brief project description answering these questions:
    a. What is the domain of the application? Describe it.

    The domain of an application refers to the area of knowledge your application resides in. For example, if I am making an application for a hospital, the domain would be something like healthcare/patient management/logistics (it would depend on what the application is trying to do).

    The domain is food product supply management. So, it would involve the logistics behind gathering and storing food products and supplying them to customers.

    b. What aspects of the domain are modeled by the database?In answering this question, you will want to talk about what your project is trying to address and how it fits within the domain. It is likely that

in the process of answering these questions you will bring up examples of a real-life situation that the application could be applied to.

The application is from the perspective of a supplier company managing different deliveries and orders from farmers to different customers (who could be either individuals or businesses). We're trying to address the different components of logistics behind delivering food products to the customers. For instance, keeping track of which farmers provide which type of produce, the drivers that will make the deliveries, the different items that make up one order, the orders that will be grouped in one delivery, and the payments received from customers for deliveries.

3. Database specifications: (3-5 sentences) What functionality will the database provide? I.e., what kinds of things will people using the database be able to do.

Users of the database will be able to…

- manage orders of food products from customers
- record bills and payments made by different customers for their orders
- keep track of how the deliveries are being shipped to customers (e.g. which driver and which vehicle will be transporting the products).
- view the different farms that supply the items for a customer's order

4. Description of the application platform: (2-3 sentences)
    a. What platform will your project use (PHP/JDBC/etc.)?

        We'll be using PHP.

    b. What is your expected application technology stack (i.e., any other things that you're using other than whether you're using PHP or JDBC)? Note that for DBMSs, we will only provide support for using the department's installation of Oracle. You are on your own for anything else.
        i. You can change/adjust your tech stack later as you learn more about how to get started for the project via latter tutorials.

For the database, we're planning to use the Oracle DBMS provided by the department.

For the PHP backend, we're using the Laravel framework.

For the front end, we're planning on using the Vue.js JavaScript framework.

5. An ER diagram for the database that your application will use. It is OK to hand-draw it but if it is illegible or messy or confusing, marks will be taken off. You can use software to draw your diagram (e.g., draw.io, GoogleDraw, Microsoft Visio, Powerpoint, Gliffy, etc.)

   The result should be a legiblePDF or PNG document. Note that your ER diagram must use the conventions from the textbook and the lectures. For example, do not use crow's feet notation or notation from other textbooks).

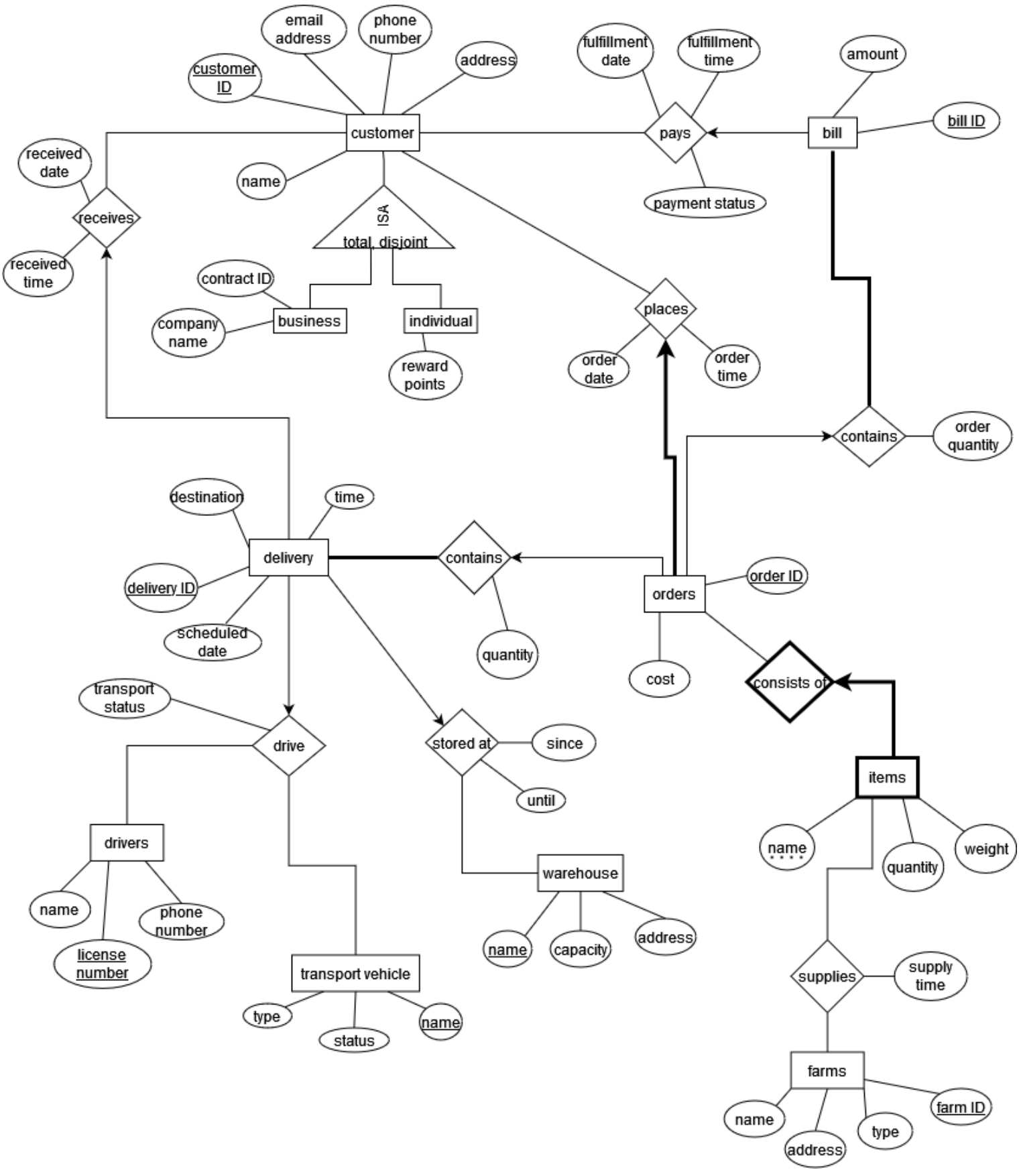
   a. Please limit your diagram to a letter size page (8.5 x 11 inches). If you require additional space, talk to your project mentor beforehand as this might mean that your project is a bit more complicated than what we expect.

OUR ER DIAGRAM IS AT THE END

6. Your E/R diagram should adhere to the expectations listed above.
7. Other comments, as appropriate, to explain your project.

   Our E/R diagram is on the last page. To clarify some of the entities we've included:

   a. Our weak entity is the items that make up an order (e.g. fruits, meat, vegetables), and must be identified by both the item name and the order ID.
   b. Our ISA hierarchy is trying to represent customers that can be a company or an individual. A company can have a contract with the supplier (hence the contract ID attribute), and an individual can accumulate reward points with the supplier.
   c. We've organized the orders so that many orders can make up one bill, so the relationship between them would contain the total quantity of orders making up the bill.
   d. One delivery can also contain multiple orders from a customer, so the relationship between them also contains the quantity of orders that make up the delivery.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