DATAWAREHOUSE COURSE (2015-2016)

PROJECT: RETAIL SALES DW

PART I

Objective

You are required to design and implement a data warehouse that supports the analytical requirements of a chain of retail stores.

An extraction of an operational database is shared with you and your goal is to design a data warehouse and create all the ETL processes you find necessary to support the analytical needs of the organization. At this stage of the final project the students should envision the reports that could be generated and design the DW as flexible as possible, supporting the generation of analytical insights with Effectiveness, Efficiency and Efficacy.

Rules

1. You should present a final report explaining all your choices and used approaches. You should just explain everything in the report and add to appendix all the products you find interesting to include;
2. You can do the project individually or in groups of maximum three students;
3. You should send the final report before December 20, 2015, 23:59h to jnneves@novaims.unl.pt ;
4. Any project delivered after the deadline will have a penalty on the final grade. For each day of delay, a penalty of 2 values (from a total of 20) will be applied;
5. You will be asked to present your work and discuss it during the week starting at the 4th of January 2016 (presentation dates will be scheduled with each group);
6. The final project discussion will include a 15 min presentation (with or without presentation aids – e.g. Power Point slides) and a 30 min open technical/business discussion with the group;
7. The presence of all group elements in the discussion is **mandatory.** Failing to meet this requirement will originate the student to fail in the course.

Loading of the Operational Database

The operational database will be provided as a set of flat files. A conceptual and a physical model will be provided (Power Designer files) together with the scripts necessary to implement the operational database in SQL Server.

In the next pages both models, the conceptual (Figure 1) and the physical (Figure 2) data models are presented for documentation purposes. It is a pre-requisite of this project the loading of the SQL Server tables that result from this models with the data provided as a set of text files.

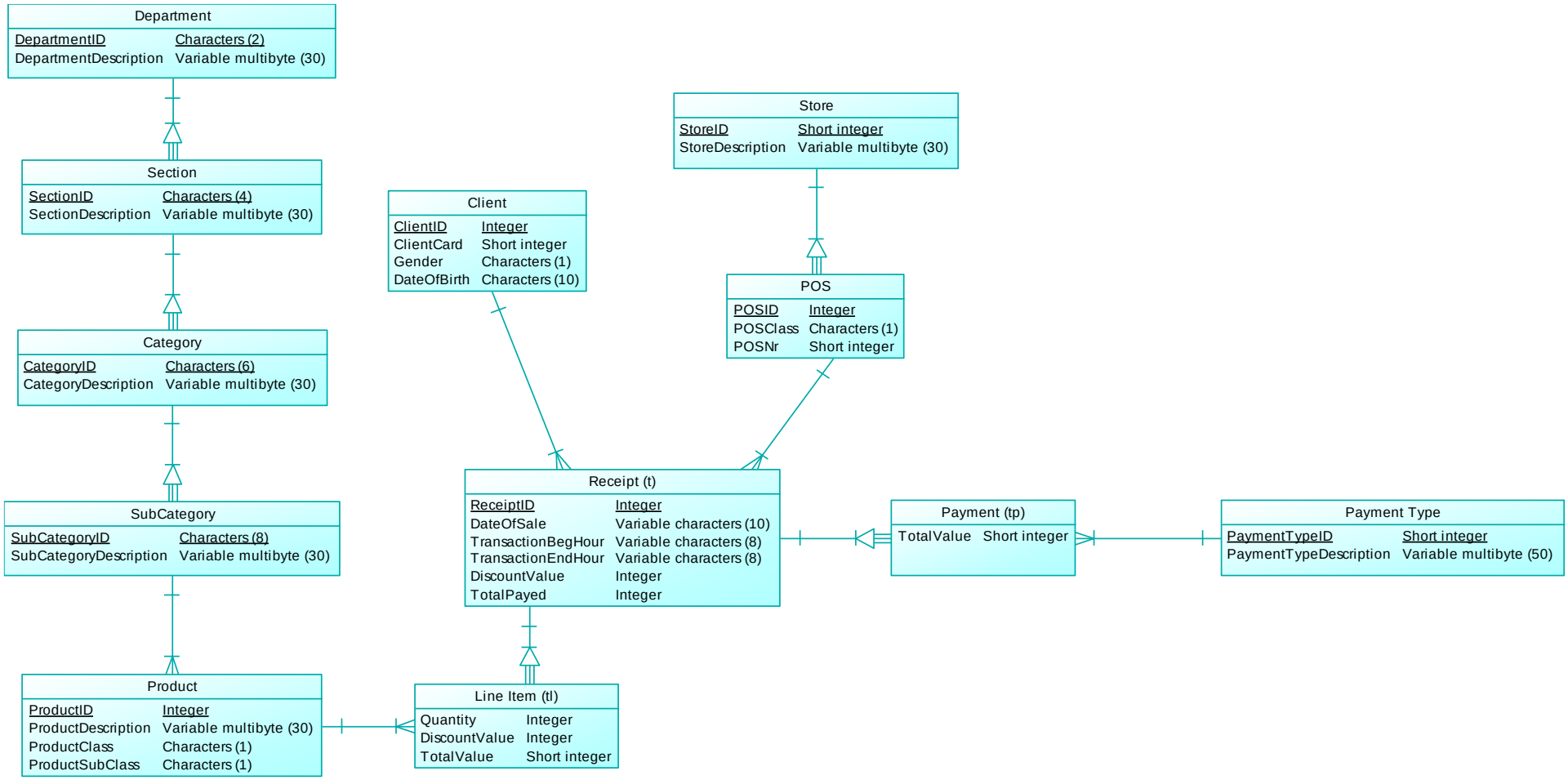

Figure 1 – Operational Conceptual Data Model

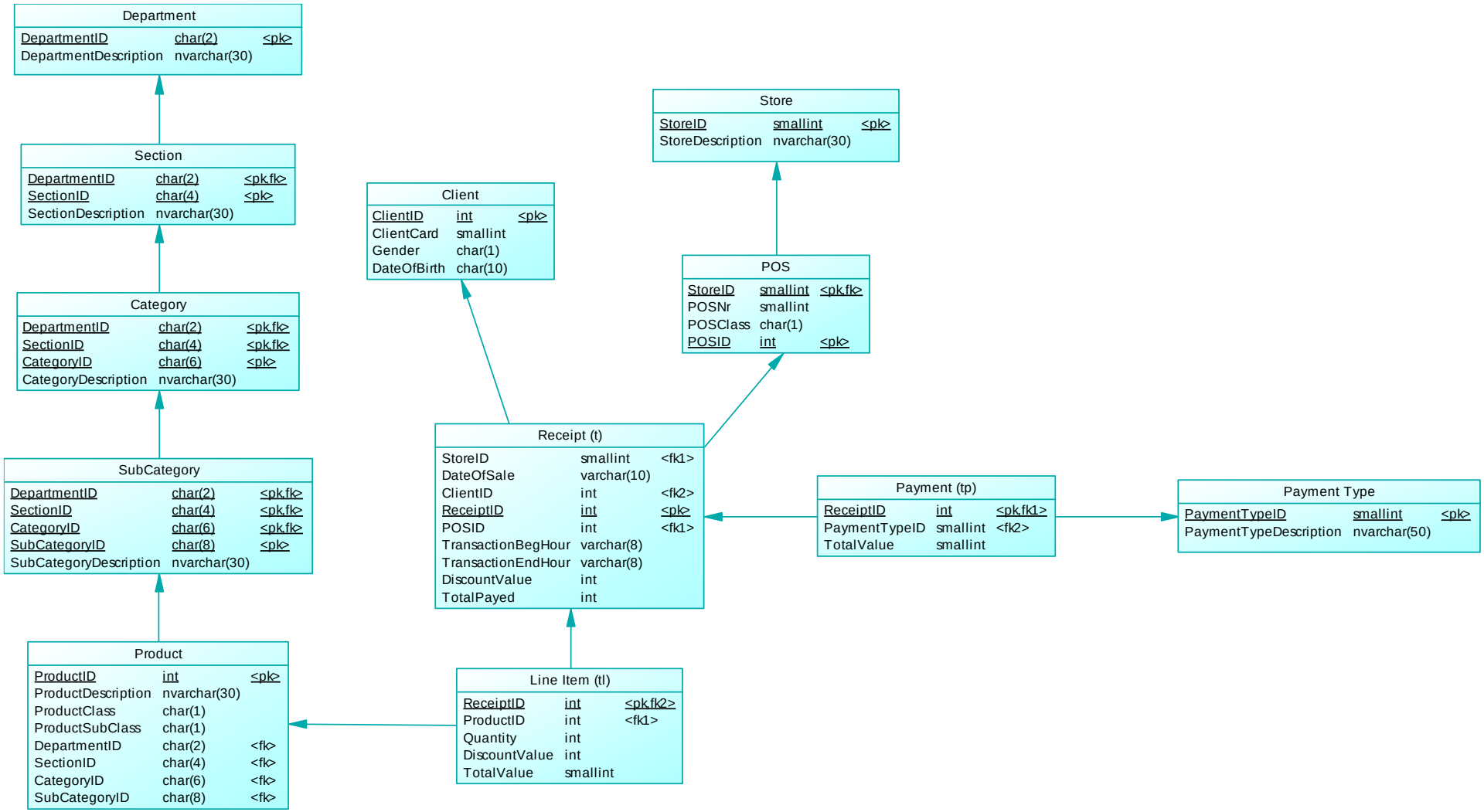

Figure 2 – Operational Physical Data Model in SQL Server (the relative position of the attributes was changed to match the data)