**The list of requirements**

1. Proposal is submitted with all required specifications.
2. ERD is included in the proposal; the number of tables is 13.
3. Most tables contain the required number of entities.
4. 15 reports are submitted in 2 formats: pdf – description, sql – description + executable code.
5. The following fields are masked: s24240370.customers\_ProfG\_FP – password, address; s24240370.customers\_archive\_ProfG\_FP – address; s24240370.credit\_cards\_ProfG\_FP – card\_number, exp\_date, cvv; s24240370.phone\_numbers\_ProfG\_FP – phone\_number; s24240370.emails\_ProfG\_FP – email\_address.
6. Business are submitted in 2 formats: pdf – description, sql – description + executable code.
7. To resolve the issue with the slow system indexed view was created s24240370.sales\_report\_view\_ProfG\_FP with the clustered index inx\_sales\_report\_view\_ProfG\_FP.
8. To resolve the issue with data retention policy, archive table was created: s24240370.customers\_archive\_ProfG\_FP. Before the customer is removed from s24240370.customers\_ProfG\_FP, most of their personal information, including the information from s24240370.emails\_ProfG\_FP is copied to archive table, it’s achieved with s24240370.trg\_customer\_archive\_ProfG\_FP trigger (instead of delete).
9. The procedures that crates json payloads are s24240370.get\_customer\_preferences\_json\_ProfG\_FP, s24240370.get\_order\_details\_ProfG\_FP, s24240370.get\_payment\_status\_ProfG\_FP.
10. 4 user-defined functions were created: s24240370.is\_valid\_email\_ProfG\_FP, s24240370.is\_valid\_phone\_number\_ProfG\_FP, s24240370.get\_full\_name\_ProfG\_FP, s24240370.get\_date\_specified\_period\_ProfG\_FP.
11. 18 stored procedures were created:

* most business rules procedures use error handling, 3 examples are s24240370.add\_customer\_ProfG\_FP, s24240370.add\_order\_ProfG\_FP, s24240370.user\_password\_reset\_ProfG\_FP;
* most business rules procedures use transaction control, 2 examples are s24240370.issue\_refund\_ProfG\_FP, s24240370.add\_customer\_ProfG\_FP;
* there are a couple of nested store procedures, the 1 example is s24240370.cancel\_order\_ProfG\_FP calls to s24240370.issue\_refund\_ProfG\_FP, the return of issue refund procedure is evaluated in cancel order, the order is not canceled if the refund could not be initiated.
* all store procedures have adequate comments.

1. 8 triggers were created for 7 different tables:

* 3 on delete: s24240370.trg\_instead\_of\_delete\_picker\_ProfG\_FP, s24240370.trg\_category\_removal\_ProfG\_FP, s24240370.trg\_customer\_archive\_ProfG\_FP;
* 2 on insert: s24240370.trg\_insert\_order\_products\_ProfG\_FP, s24240370.trg\_num\_credit\_cards\_ProfG\_FP;
* 2 on update: s24240370.trg\_canceled\_orders\_ProfG\_FP, s24240370.trg\_update\_email\_ProfG\_FP;
* 1 on insert/delete/update: s24240370.trg\_customer\_logs\_ProfG\_FP.

1. Presentation on 12/5.

**Database objects**

**Tables – 13**

* s24240370.customers\_ProfG\_FP
* s24240370.customers\_archive\_ProfG\_FP
* s24240370.credit\_cards\_ProfG\_FP
* s24240370.phone\_numbers\_ProfG\_FP
* s24240370.emails\_ProfG\_FP
* s24240370.orders\_ProfG\_FP
* s24240370.pickers\_ProfG\_FP
* s24240370.pickers\_orders\_ProfG\_FP
* s24240370.payments\_ProfG\_FP
* s24240370.products\_ProfG\_FP
* s24240370.categories\_ProfG\_FP
* s24240370.order\_product\_details\_ProfG\_FP
* s24240370.logs\_ProfG\_FP

**Views – 1**

* s24240370.sales\_report\_view\_ProfG\_FP

**Index – 1**

* inx\_sales\_report\_view\_ProfG\_FP

**Functions – 4**

* s24240370.is\_valid\_email\_ProfG\_FP
* s24240370.is\_valid\_phone\_number\_ProfG\_FP
* s24240370.get\_full\_name\_ProfG\_FP
* s24240370.get\_date\_specified\_period\_ProfG\_FP

**Stored procedures – 18**

* s24240370.add\_customer\_ProfG\_FP
* s24240370.check\_customer\_loyalty\_ProfG\_FP
* s24240370.user\_password\_reset\_ProfG\_FP
* s24240370.customer\_email\_update\_ProfG\_FP
* s24240370.cancel\_order\_ProfG\_FP
* s24240370.customer\_phone\_number\_update\_ProfG\_FP
* s24240370.order\_details\_type\_ProfG\_FP
* s24240370.issue\_refund\_ProfG\_FP
* s24240370.send\_email\_confirmation\_ProfG\_FP
* s24240370.get\_sales\_summary\_ProfG\_FP
* s24240370.get\_order\_frequency\_ProfG\_FP
* s24240370.is\_valid\_customer\_id\_ProfG\_FP
* s24240370.get\_customer\_preferences\_json\_ProfG\_FP
* s24240370.get\_frequent\_cancelers\_ProfG\_FP
* s24240370.get\_customer\_credit\_card\_count\_ProfG\_FP
* s24240370.get\_order\_details\_ProfG\_FP
* s24240370.get\_payment\_status\_ProfG\_FP
* s24240370.mark\_customer\_as\_suspicious\_ProfG\_FP

**Triggers – 8**

* s24240370.trg\_insert\_order\_products\_ProfG\_FP
* s24240370.trg\_canceled\_orders\_ProfG\_FP
* s24240370.trg\_update\_email\_ProfG\_FP
* s24240370.trg\_customer\_logs\_ProfG\_FP
* s24240370.trg\_instead\_of\_delete\_picker\_ProfG\_FP
* s24240370.trg\_category\_removal\_ProfG\_FP
* s24240370.trg\_num\_credit\_cards\_ProfG\_FP
* s24240370.trg\_customer\_archive\_ProfG\_FP