

Congratulations!

Thank you for your interest in working with us. After reading through all the applications we decided to invite you to our first round. We want you to show us your talent by working on problems we think are similar to day-to-day work in the Data Analyst Team and will hopefully form a good base for our discussions further down the process. We believe that it's for the mutual benefit of both the team and the candidate to get a good taste of one another's way of working and thinking and we have designed the assignment with that in mind.

Description

Part of Prezi's revenue stream is generated by selling contracts to Companies. We call them "Team Customers"

Those contracts have always a validity period and generally a number of licenses ("team seats") sold with it. At times, additional services are sold as well, like ad-hoc trainings or other specific integrations. Sales price and invoice amounts may vary depending on a mix of those factors.

If our customers are satisfied, they may also reach to us mid-term during their current contract and ask for more licenses. At that point, a new invoice with the upsold amount is generated for the same account.

This brings us to generate a plethora of different invoices, each reflecting a different validity period/number of seats/services sold for each team account.

Your task

1) We would like to build a simple report that every month can show us an **annualized estimate of the total Team business value stream**. To help you narrow down the problem, this is not a revenue forecasting problem or bookings/cashflow reporting exercise. It is instead a representation over time of how much money is held by our team accounts.

- The output should have the following columns:
"Month, total_annualized_amount"
- You can point the reporting at the beginning of the each month
- Different invoices have different validity period and invoice days: the estimate should take this into account and standardize them

For simplicity, in this first model we can think as if every invoice *would* cover a standard 365 days period

2) Can you think of other ways to calculate the annualised amounts on a monthly basis, given that harmonising invoices of different length is a factor?

Data provided

invoice_data.tsv

Contains all invoices for each team, the invoice amount, the validity period of the invoice. Data is anonymised and invoice amounts are randomised.

```
(  
account_id STRING,  
invoice_period_from DATE,  
invoice_period_until DATE,  
invoice_days INT,  
invoice_amount BIGINT  
)
```

d_date.tsv

Convenience data containing every calendar day (and more convenience columns)

Deliverable

Please send us the solution using any SQL dialect of your choice. You should send us the solution, alongside with the SQL you used. Please feel free to include anything that can help us understand your thinking process.

FAQ

How much time should I spend on this?

We know that you're probably super busy and time may be quite hard to find. There is no actual limit as to the amount of time someone can spend on it. However, we'd like you to spend no more than 4 hours for this task.

When is the deadline?

You get 5 business days from the time you get this assignment.

Need any other clarification?

If you have any other questions either just hit reply to the latest email thread you got open with us or send a direct email to ivan.santini@prezi.com , balazs.szakacs@prezi.com