**TASK 3**

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| Metric | Data source | Business definition | Formula /Logic to calculate and test | Approvals/Questions |
| Registered users | *server\_name,db* | All users that were registered via… site. UID column is unique identificator for each registered user | SELECT COUNT(DISTINCT [uid]) registered\_users  FROM [dbo].[tb\_users] |  |
| Active users | *server\_name,db* | Users with deposits/withdrawal, that have any operations in [DB billing].[dbo].[tb\_operations] table | SELECT COUNT(DISTINCT u.uid) active\_users  FROM [dbo].[tb\_users]u  INNER JOIN [dbo].[tb\_logins]l ON u.uid=l.user\_uid  INNER JOIN [dbo].[tb\_operations] o ON o.login=l.login |  |
| #Operations | *server\_name,db* | Total number of operations we have for users in [DB billing].[dbo].[tb\_operations] table | SELECT COUNT(\*) #operations  FROM [dbo].[tb\_operations] |  |
| AVG Amount of first client operation | *server\_name,db* | First client operation can be identified by operation\_date column , based on it avg amount can be calculated for all clients | SELECT AVG(amount)  FROM(  SELECT u.uid,  o.amount,  ROW\_NUMBER() OVER(PARTITION BY u.uid ORDER BY o.operation\_date) operation\_order  FROM [dbo].[tb\_users]u  INNER JOIN [dbo].[tb\_logins]l ON u.uid=l.user\_uid  INNER JOIN [dbo].[tb\_operations] o ON o.login=l.login ) a  WHERE operation\_order=1 |  |
| Customer Lifetime | *server\_name,db* | Calendar months between first and last clients operation. First /last client operation can be identified by operation\_date columns | SELECT AVG( customer\_lifetime) avg\_customer\_lifetime  FROM(  SELECT u.uid,  DATEDIFF(m, MIN( o.operation\_date) , MAX(o.operation\_date)) customer\_lifetime  FROM [dbo].[tb\_users]u  INNER JOIN [dbo].[tb\_logins]l ON u.uid=l.user\_uid  INNER JOIN [dbo].[tb\_operations] o ON o.login=l.login  GROUP BY u.uid  )a |  |
| AVG Customer Lifetime Volume | *server\_name,db* | Total Amount (SUM) for each clients operation, perclient. Based on value for each client, average can be also calculate | SELECT AVG(amount)avg\_amount  FROM (SELECT u.uid,  SUM(amount) amount  FROM [dbo].[tb\_users]u  INNER JOIN [dbo].[tb\_logins]l ON u.uid=l.user\_uid  INNER JOIN [dbo].[tb\_operations] o ON o.login=l.login  GROUP BY u.uid)a |  |

Documentation can also include screenshots of mockup with description. Example below:  
Timeline

Description automatically generated with medium confidence  
  
Scotter plot chart :  
Y axis – AVG Customer Life, Month  
X-Operation Count  
Color represents countries.  
Chart represents dependency between Operation count and Avg Customer Life by countries  
Required filters:..  
Date range: