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A)

Besides ways to reduce the risk of a data leak. One way to protect sensitive information is to encrypt all the info, and keep the encryption key secure. That way a hacker needs to both steal the information + the key. We also don´t store all information about the card. Especially the CVS code

B)

1. You can change functionality from the server instead of having to force the client to update the software. Makes it easier to maintain
2. All processing is done at the server, so you don't have to send out unnecessary data for the client to process. This increases performance
3. Same as above, but it also increases security as you don't send out unnecessary data that should not be read by the user.

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B) No it is not visible as session A has not yet committed the insertion. Before it is committed the transaction can only be viewed by session A

C) The query runs with no return. This is because it will not modify A:s entry until A has committed it. So B waits for A to commit.

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A) We did not experience a problem as the script had already filled up the first reservation with passengers before the second script could make a reservation.
B) You can theoretically over book but it will be extremely hard to do because you would have to time the available seat checks perfectly so that both have done the check before inserting a booking.
C) We could not do this with sleep functions but you could potentially do this if you have some form of script that books two reservations on the same flight at the same time so that the functions run in parallel the entire time.
D) As it is not plausible we did not have to do any changes