

Outline Design of the Online Ticket Booking System(sample)

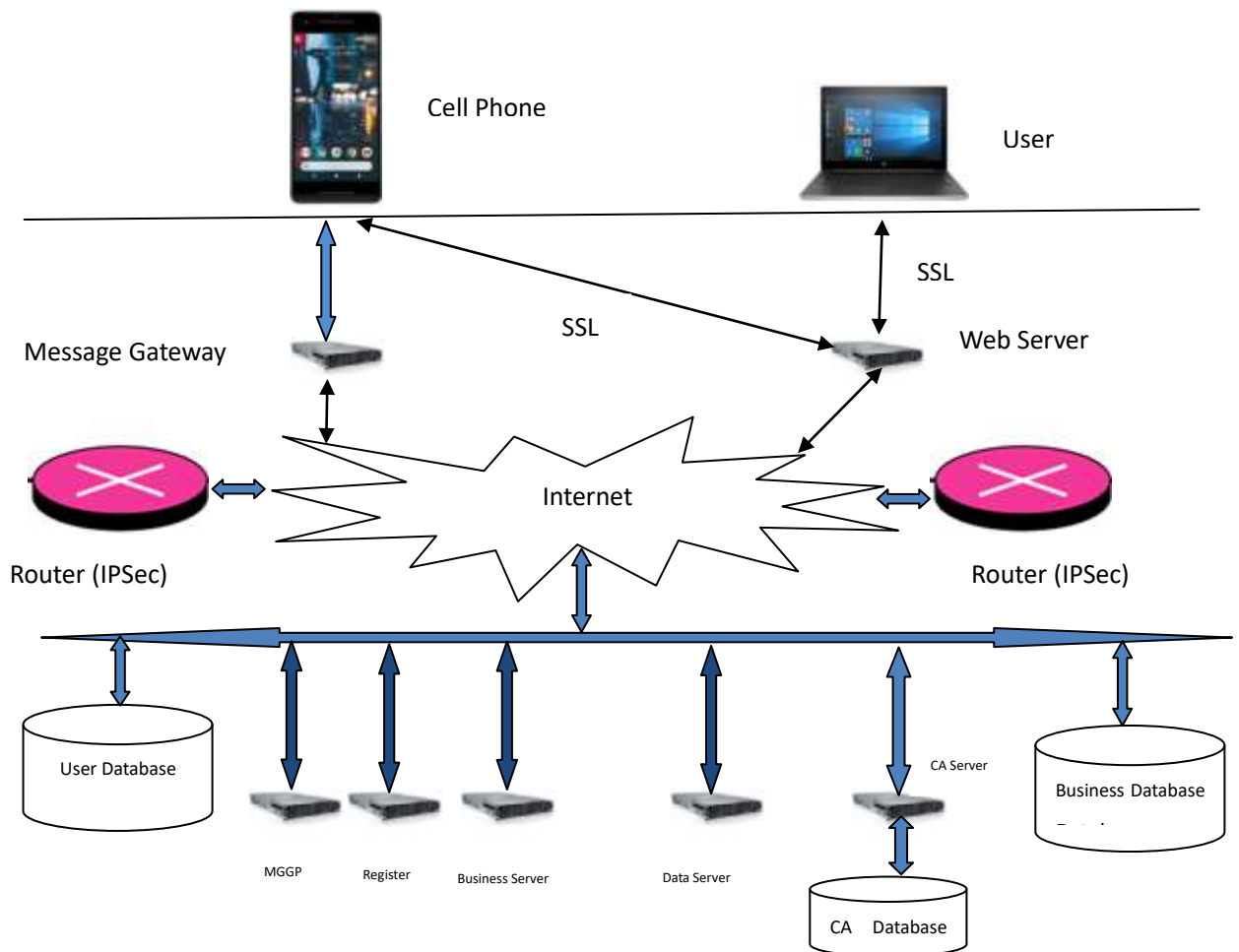
Author:

Goals:

1. Secure access and operating
2. Computer and mobile phone access control
3. Ensure the integrity of the information
4. Bill and receipt originator can't deny it later

.....

1. Architecture



Note:

Message Gate: provide two type access models: computer access and cell phone access.

Operating includes Register, Login, Logout, Inquire, Booking, etc.(Sample)

Web Server:

SSL:

IPSec: adopt Tunnel mode, all of package will be encrypted(Sample).

Router:

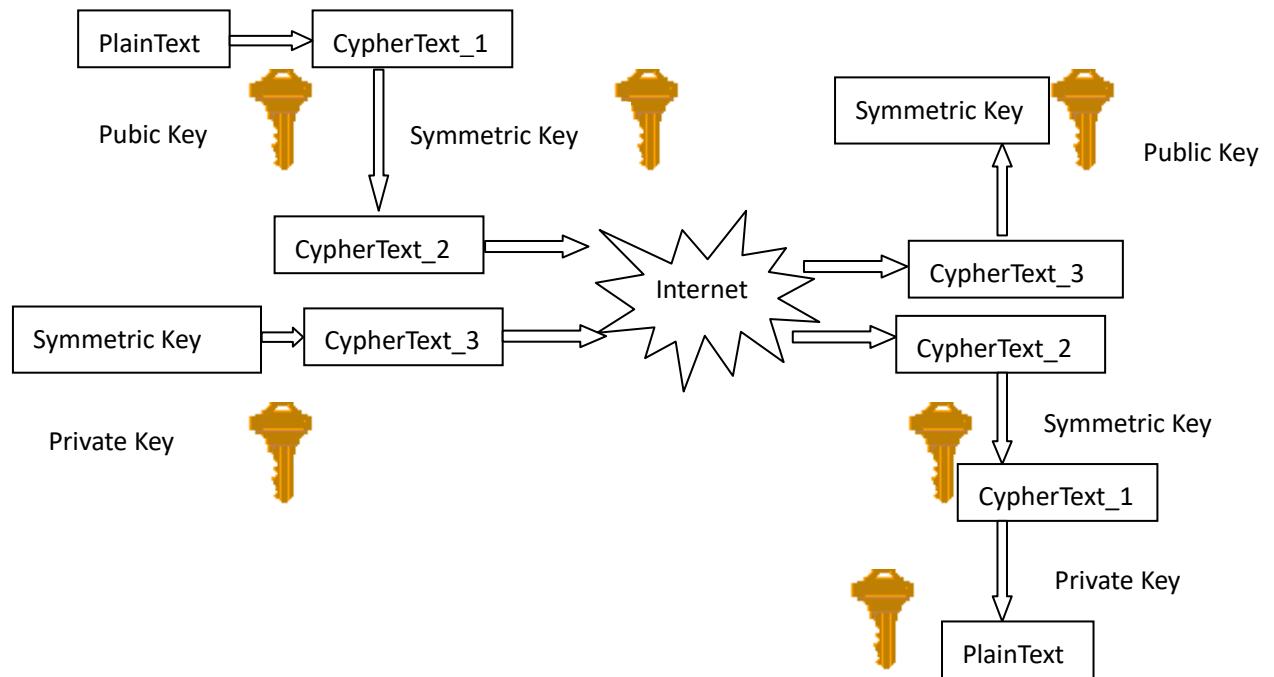
User Database:

MGPP:

Register:

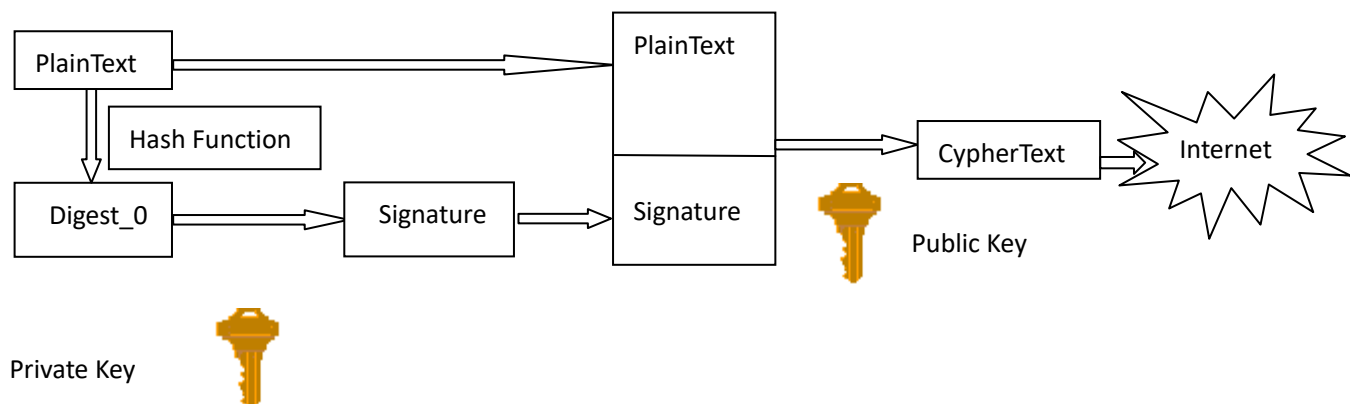
Business Server:
 Data Server:
 CA Server:
 CA Database
 Business Database:

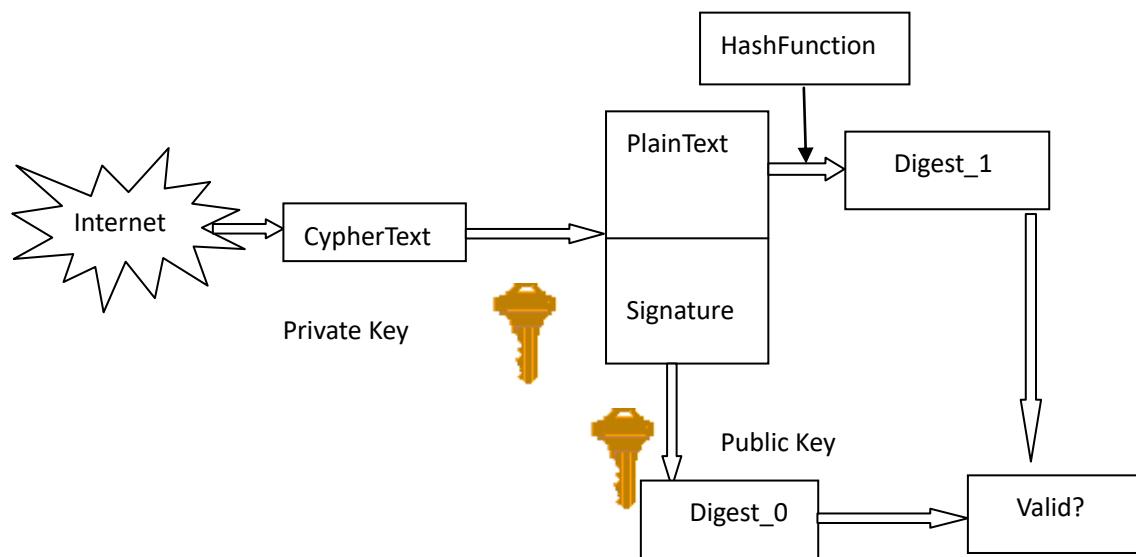
2. Security design



Note:

1. Plaintexts are sensitive information, like credit card information.
2. Encrypting process:
3. Decrypting process:

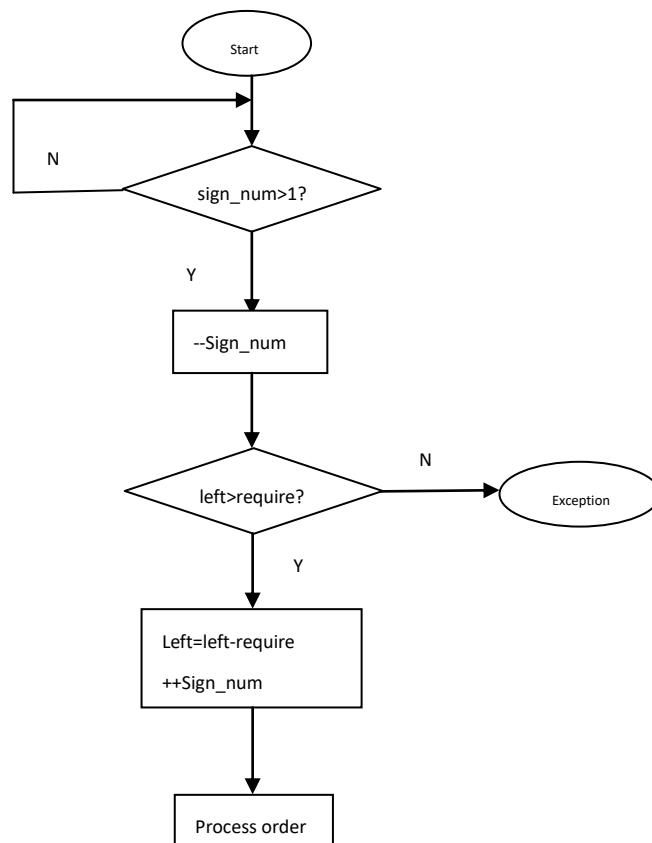


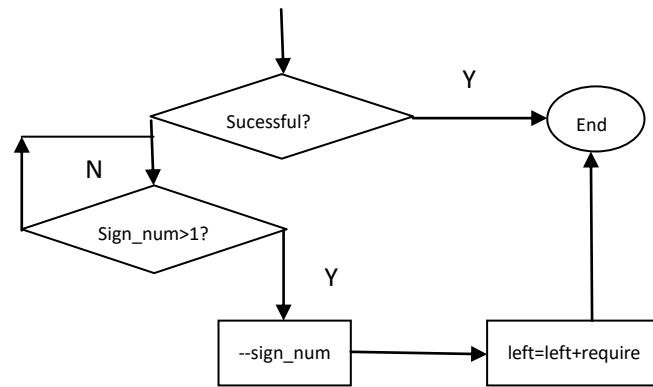


Note:

1. Plaintexts are bill, receipt, etc..
2. Signing process:
3. Verifying process:

3. Concurrency mechanism





Note:

1. Sign_num is signal to guarantee that there is only one user operates the variable (Left) at a time
2. left shows the left tickets.
3. require means the tickets number the user want to book.
-

4. Other design

Such as CA center design, User interface, Database,....