**the idea:**

creating a solution for hotel reservation companies where their customer reservations data would stay available for customers during a system down event.

**use case:**

This tool will be triggered when a system down takes place.

When a system down occurs a page indicating a system down (error page) will appear and redirect to a page where customers and needed employees (decided by the company) may query reservation data.

for this to happen, the reservations in the database shall be backed up to a secondary database repetitively (time is decided by company), and when a system down occurs aws cloudwatch will trigger a lambda function which will redirect all traffic (in route 53) to a cloud front page attached to an S3 bucket (which has the alternative website) and attached to the secondary database.

This may be accomplished by using several aws services.

**aws services used:  
  
Amazon CloudFront**: better security & a Content Delivery Network (CDN) service.

**Lambda Function**: for querying the secondary database during SD & for automatically changing the direction of traffic in route53 when SD.

**S3**: filesystem which contains the alternative website and connects to the secondary database using API and a lambda function.(acts as a tool for users to query the secondary database).

**cloudwatch**: to monitor the main reservation system and trigger a lambda function when SD.

**stretch goals:**

add AWS shield and aws Guard duty to CloudFront for security.

Regards,

Saja

