We evaluated the system by following the FURPS framework.

**Functional requirements:**

We plan to measure this from function completeness, system component interaction.

* Have we accomplished major of components?
* Does our system satisfy multiple user stories?
* Does our system work properly as a whole?
* How do we combine stack and cloud infrastructure?
* How do APIs communicate with SQL server and React JS?

**Usability requirements:**

We plan to measure this from layout, function separation, content division, ease of using, user experience.

* Is the layout looks properly?
* Do we separate different functions for different types of users? For example, Admin, Organizer, Participant have different requirements. (Admin can manage applications, tweak events and design bugs. Organizer can create events, manage events and get payment. Participant can view events, book events and pay for events.)
* How do we arrange the content?
* Is our system easy to use for people who are not familiar with computer operations?
* Do our events list as categories properly? How could user search for a specific event?

**Reliability requirements:**

We plan to measure this by evaluating unit test and services, then see if it can handle special situations.

* Does each component pass the unit test?
* Do we separate Front-end and Back-end? When Back-end crushed down, what can we see on Front-end?
* When bugs come out, how could we locate them quickly?
* If database goes down will our system still work?
* If network degraded (dns) will our system still work?
* Does our system can run on multiple different internet explorers?

**Performance requirements:**

About this, we need some quantifiable indicators.

We plan to use JMeter for stress test.

In the result, we can focus on:

* Response Time (RT): Response time refers to the time it takes for the entire process from the time the client initiates a request to the end of the client receiving the response returned from the server.
* Run Time: The ability of a system or component to execute tests while operating in a production environment.
* Throughput: The amount of transactions produced over time during a test.

**Security requirements:**

We plan to evaluate the system security from data protection and identity verification.

About data protection:

* Is encryption set for data transmission?
* Does our system have database protection? (Azure firewall)
* How do we store the sensitive information like password? (hash and salt)
* How do we store the data? Do we have data backup?

About identity verification:

* How do we verify the identity about users? Can we send email or SMS to users?