

a. Functional requirements

- Student:

+ The ability to upload documents, select printers, and customize printing options easily.

+ The ability to track printing logs, check remaining pages.

- HCMUT SSO:

+ Manage login sessions.

+ Ability to create/delete accounts.

- BKPay Service:

+ Check your payment histories.

+ Update account balance and page number after successful payment.

- SPSO:

+ Receive a printing request and check if it is valid or not.

+ Ability to manage printer status, view, and check print logs.

+ Configurable for printers

- IT department

+ Gain access to the system at all times, and have the ability to change the characteristics of the system.

+ Ensure stable operation of the system and the ability to upgrade in the future.

b. Non-functional requirements

- Performance:

+ The system must ensure a quick response time when users request printing and be able to handle multiple requests (< 10 seconds per request).

+ The system's website will be loaded in 3 seconds if there are less than 1000 visitors at the same time.

- User experience:

+ The interface should have an attractive and visually pleasing design, with attention to colors, layout, and fonts.

+ User-friendly interface.

- Availability:

+ The system operates 24/7 except during maintenance. However, printing only works between 6am and 9pm

- Compatibility:

- + Compatible with many web browsers such as Google Chrome, Firefox, Microsoft Edge