



JOB DESCRIPTION

Position Title	:	Back-end Developer
Department	:	IT Operation Office
Report to	:	IT Manager
Reportee (if any)	:	
Location	:	Phnom Penh

I. Position Summary:

University of Puthisastra is looking for a talented **Back-end Developer with strong Python and FastAPI experience** to design and implement **microservices-based backend systems**. The ideal candidate will have at least **3 years of backend development experience**, strong knowledge of **API architecture**, and experience working with **PostgreSQL databases** and modern cloud-native development practices.

II. Duties and Responsibilities: *(Verbs are listed below for reference only)*

The overall job description below outlines the main areas of responsibilities of the Employee:

- Design, develop, and maintain **microservices-based backend systems** using **Python and FastAPI**.
- Build **scalable, secure, and high-performance RESTful APIs**.
- Design and manage **PostgreSQL database schemas, queries, and performance optimization**.
- Develop and maintain **independent microservices that communicate through APIs or message queues**.
- Integrate backend services with **third-party systems and internal services**.
- Implement **authentication, authorization, and API security**.
- Work closely with **frontend developers (ReactJS) and mobile developers** to deliver integrated solutions.
- Implement **service monitoring, logging, and error handling**.
- Write **clean, maintainable, and well-documented code** following best practices.
- Participate in **code reviews, system architecture discussions, and technical planning**.
- Support **deployment, monitoring, and scaling of microservices in containerized environments**.

III. Minimum Qualifications and Requirements:

1. Experience:

- Proficient knowledge of relevant programming/computer languages for Android, iOS, and Windows devices.
- A portfolio of applications you have created or contributed to.
- Ability to multitask.
- Excellent interpersonal skills

2. Education:

- Bachelor's degree in computer science, software engineering, management information science, or a related field

3. Skills/Competencies:

- **Minimum 3 years of backend development experience using Python.**
- Strong experience with **FastAPI or similar Python frameworks (Django, Flask).**
- Experience building **microservices architecture.**
- Strong experience with **PostgreSQL database design, optimization, and performance tuning.**
- Experience designing **RESTful APIs** and service-to-service communication.
- Experience using **ORM tools such as SQLAlchemy.**
- Familiarity with **Git version control.**
- Knowledge of **authentication and authorization mechanisms (JWT, OAuth).**
- Experience with **Docker or containerized environments.**
- Familiarity with **Node.js backend development.**
- Familiarity with **ReactJS frontend development.**
- Experience implementing **CI/CD pipelines.**

4. Personal Quality

- Ability to work as a team
- Be diligent and honest