# Architecture Diagram: (Materials Database Website)
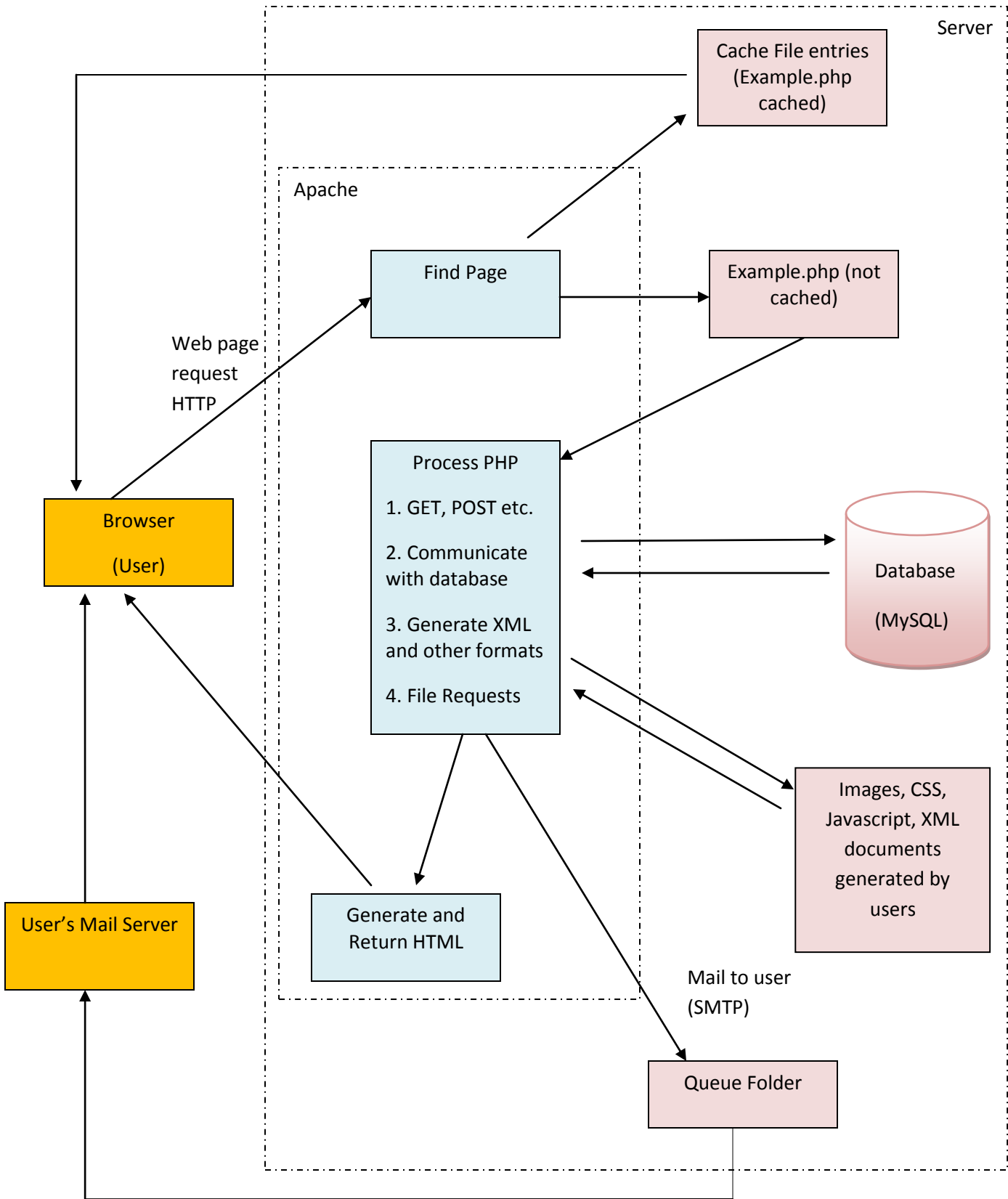
Server

Cache File entries (Example.php cached)

Apache

Find Page

Example.php (not cached)

Web page request HTTP

Browser (User)

Process PHP

1. GET, POST etc.

2. Communicate with database

3. Generate XML and other formats

4. File Requests

Database (MySQL)

Images, CSS, Javascript, XML documents generated by users

Generate and Return HTML

User's Mail Server

Mail to user (SMTP)

Queue Folder

**Architecture Flowchart:**

Browser (User)

HTTP Request

Fetch File

Return
HTML to
user

Search Cache File (if
Cache File present)

Y

File found?

N

Search Server

File found? Any
Other Request?

404 Error

Yes, with
no other
requests

Yes, but
with other
requests

```
                    ┌─────────────────────┐
                    │  Process PHP Request │
                    └─────────────────────┘
                               │
                               ▼
                              ╱╲
                             ╱  ╲         Generate
                            ╱    ╲          XML
┌──────────────────┐      ╱ What is╲              ┌──────────────────────┐
│ Mail to be sent  │◄────╱ the type  ╲───────────►│ Retrieve information │
│    to user       │     ╲ of request?╱           │ from database;       │
└──────────────────┘      ╲          ╱            │ Generate XML; store  │
         │                 ╲        ╱             │ XML on server;       │
         │                  ╲      ╱              │ Provide link to user;│
         ▼                   ╲    ╱               │ Store link in user   │
┌──────────────────┐          ╲  ╱    GET, POST   │ database tables      │
│   Queue Folder   │           ╲╱       etc.      └──────────────────────┘
└──────────────────┘                                         │
         │                                                   │
         │ SMTP              ┌──────────────────┐            │
         ▼                   │ User Form        │            ▼
┌──────────────────┐        │ Submission;      │    ┌─────────────┐
│ User's Mail      │        │ New/Edit Material;│◄──►│  Database   │
│     Server       │        │ Change/ Read from │   │             │
└──────────────────┘        │ database; Return  │   │  (MySQL)    │
         │                   │ HTML to User     │    └─────────────┘
         │                   └──────────────────┘
         │                          │
         │                          ▼
  Return │            ┌──────────────────────┐   (User, Login, Materials
  HTML to│            │ Clear corresponding  │   information; Foreign key
  user   │            │ Cache File entries   │   relationships; Links to XML
         │            └──────────────────────┘   documents on file server;
         │                                        Has its own Query cache,
         │                                        parsing, optimization etc;
         │                                        Full-text search possible)
         │
         ▼
┌──────────────────┐
│  Browser (User)  │◄──────────────── Return File
└──────────────────┘                    to user
```

Process PHP Request

What is the type of request?

Mail to be sent to user

Queue Folder

SMTP

User's Mail Server

Generate XML

Retrieve information from database; Generate XML; store XML on server; Provide link to user; Store link in user database tables

GET, POST etc.

User Form Submission; New/Edit Material; Change/ Read from database; Return HTML to User

Database

(MySQL)

Clear corresponding Cache File entries

(User, Login, Materials information; Foreign key relationships; Links to XML documents on file server; Has its own Query cache, parsing, optimization etc; Full-text search possible)

Return HTML to user

Browser (User)

Return File to user