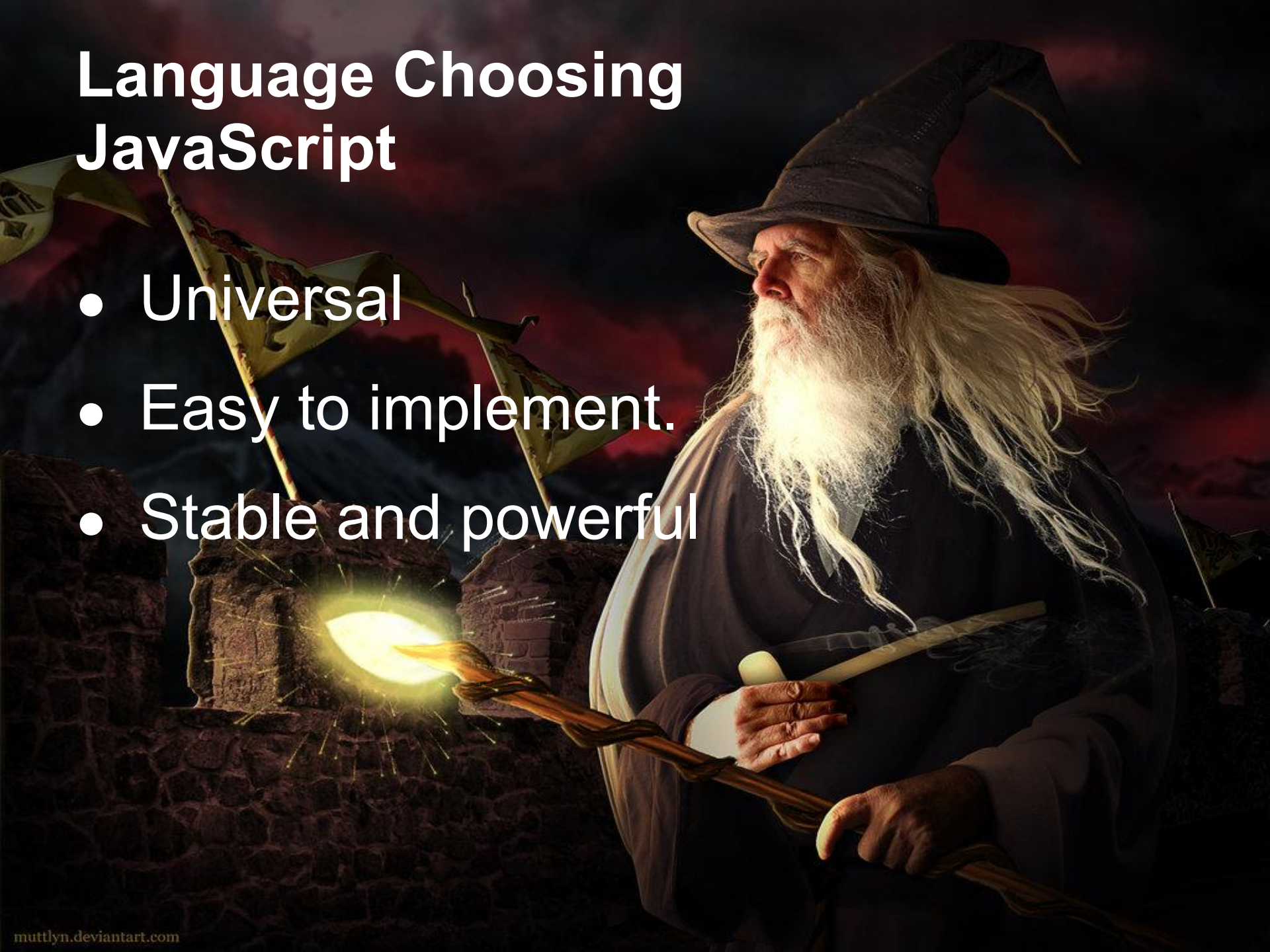# Soul Wizard

HOMEPAGE

Introduction

- Web-based game

- RTS-ish

- Written in JavaScript

- With the help of:

  ○ Crafty Game Engine

  ○ Tiled Map Editor

Language Choosing JavaScript

- Universal

- Easy to implement.

- Stable and powerful

Language Choosing
PHP

Integrates with HTML & JavaScript

Wild use

Easy to Learn

Database Communication

Good for starter

GitHub

1.Version Control

2.Work in different computers remotely and synchronize

traps
dn1111 authored 15 hours ago

resource bar, leave library
dn1111 authored 17 hours ago

preparing for db connection
System Administrator authored 17 hours ago

Merge branch 'master' of https://github.com/nl1010/webapp
nl1010 authored 17 hours ago

let's online
nl1010 authored 17 hours ago

library soul income
dn1111 authored 17 hours ago

wall, library, gateway, memory leak
dn1111 authored 17 hours ago

message display when login just WORKINGgit add -A
System Administrator authored a day ago

Message display v1,nice nice nice
System Administrator authored a day ago

Jun 17, 2013

everything works fine for login now ,except player's position, not s
System Administrator authored a day ago

everthing works,forget add soul
System Administrator authored a day ago

major bug fixed ,nearly
System Administrator authored a day ago

halfway rest
System Administrator authored a day ago

Merge branch 'master' of https://github.com/nl1010/webapp
System Administrator authored a day ago

die scene, event texts, start buildings
dn1111 authored a day ago

Our aims

- We might not have enough time to make a large detailed map and storyline.

- So, basic functions of the game:

  - Movement

  - Resource Gathering

  - Constructions

  - Fighting System

Interactions - Login

- Registration System

- Login System

- Database demo

The Game - Overall

- Very small map

- Basic Fourway movement

- Basic resource gathering

- Basic building system

- Need tech/buildings/units

- Battle system
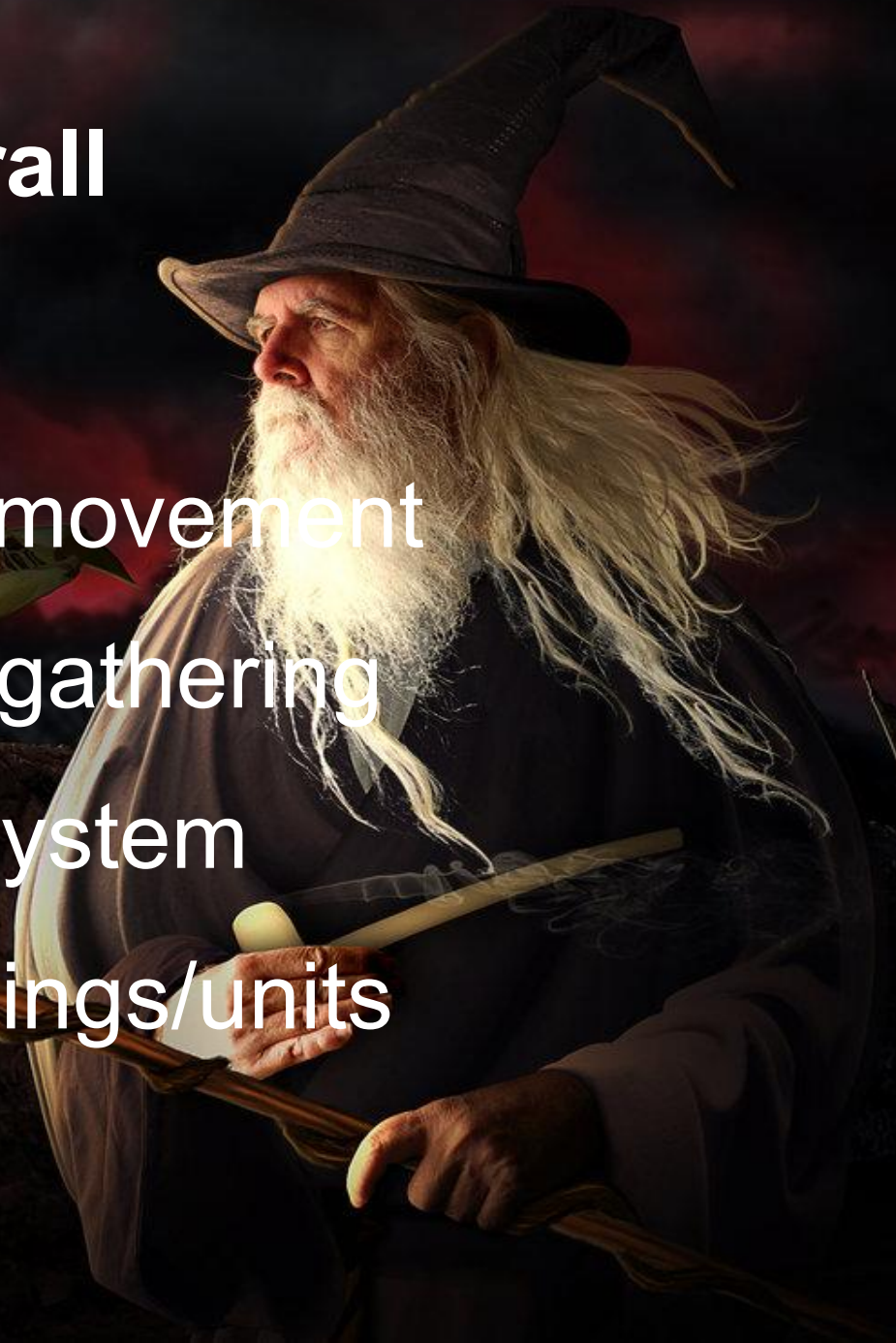
Interactions - Save/Load

- We added some little things to the story: time and space in the Island is distorted.

- Only save the resources and location. Monsters will respawn

Message System - (in develop)

- Theme of the game: depressing hopeless

- So we want to create a system to 'bring' players together.

- Placing 'shared' Messages on the Ground

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Implementation Overview - The Game

- Separation of the actual game code and the assets (map, sprites)

- Separation of the game components and scenes.

- The game engine helps a lot in this scheme

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Implementation Overview - Database/Server

The PHP Host
www.doc.ic.ac.uk

The Postgresql Database Host
db.doc.ic.ac.uk

Database/Server - languages

Client

Http + Javascript (incl. jQuery,Ajax)

Server

PHP

Database

SQL
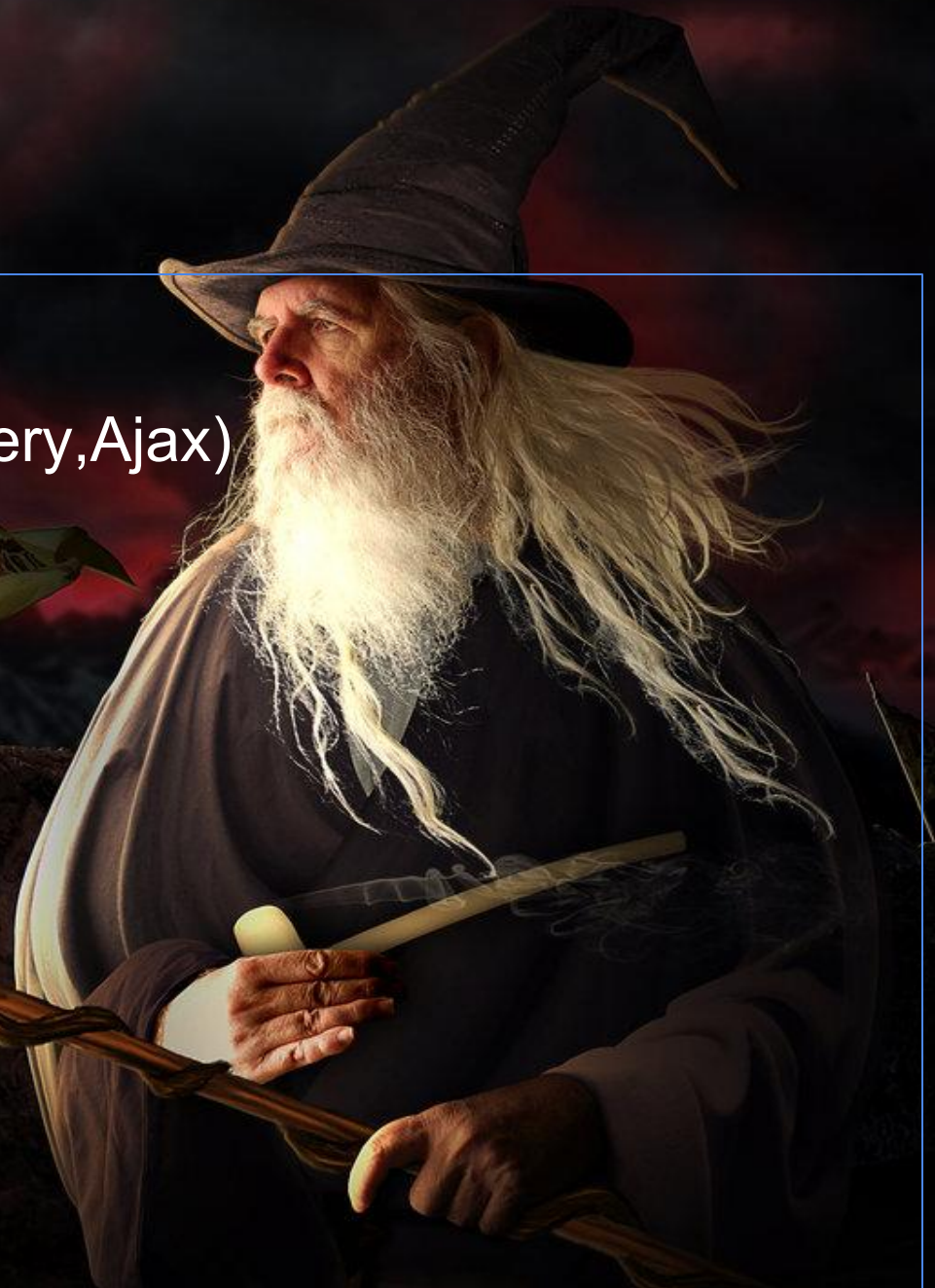
Implementation Overview
-Other Techniques In Database/Server

JQuery and Ajax

Super convenience for both

JS<-> HTML & JS<->PHP

Json (JavaScript Object Notation)

Make life easy

encode query result --send-to--> JS/PHP decode

Sessions

PHP<---->PHP

Cookies

share data JS<---->PHP

reduce communication times with server & database

Database/Server MVC structure

CLIENT
HTML,
Javascript

$\mathcal{V}$

$\mathcal{C}$

SERVER
PHPs

$\mathcal{M}$

Database
postgresDB
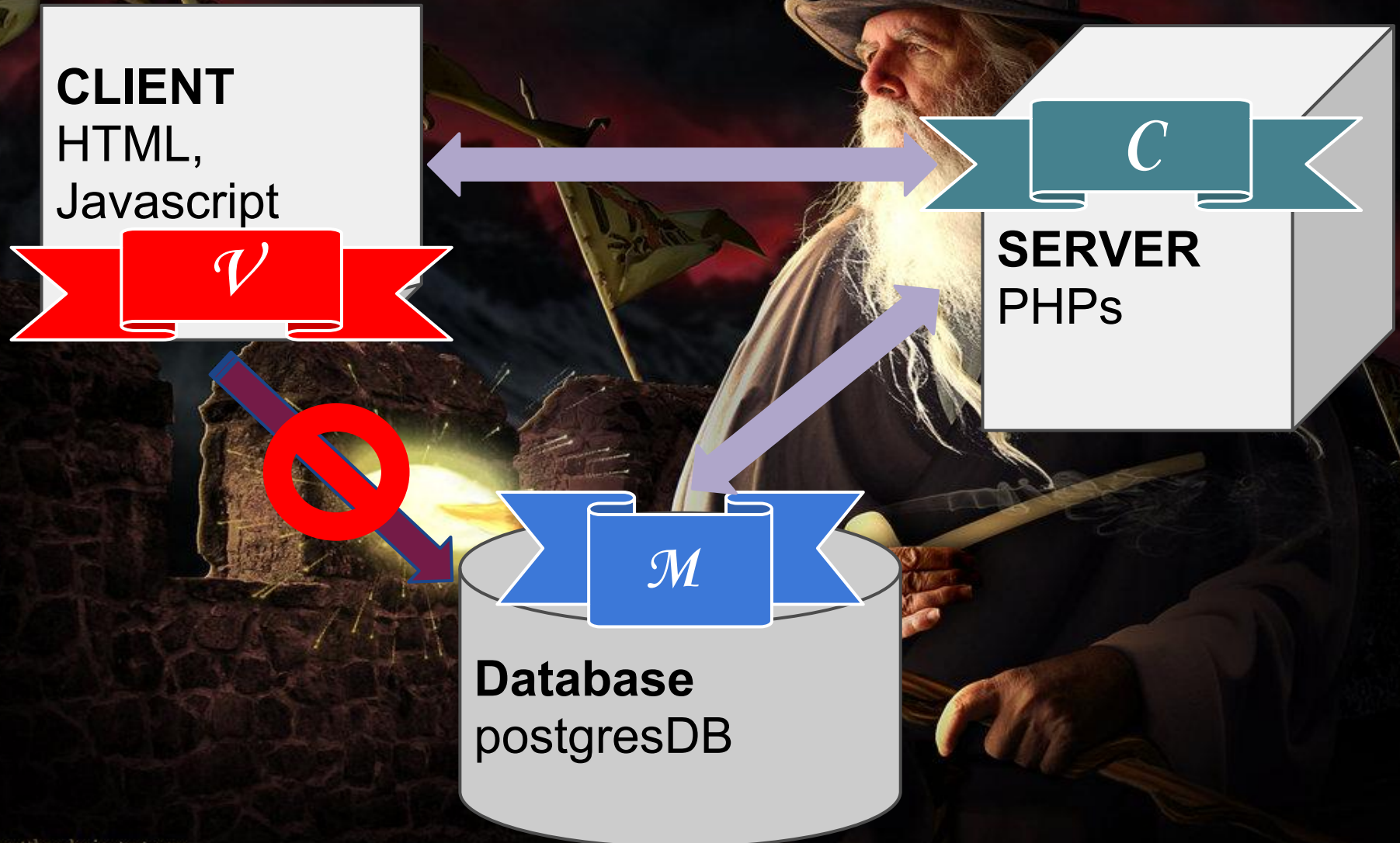
SERVER STRUCTURE
php script+php class(entities)

PHP — construct_message s.php

PHP — restore_player.php

PHP — db.php

PHP — player.php

PHP — leave_message.php

PHP — login.php

PHP — user.php

PHP — register.php

PHP — get_message.php

PHP — message.php

PHP — save.php

PHP SCRIPTS

PHP ENTITIES

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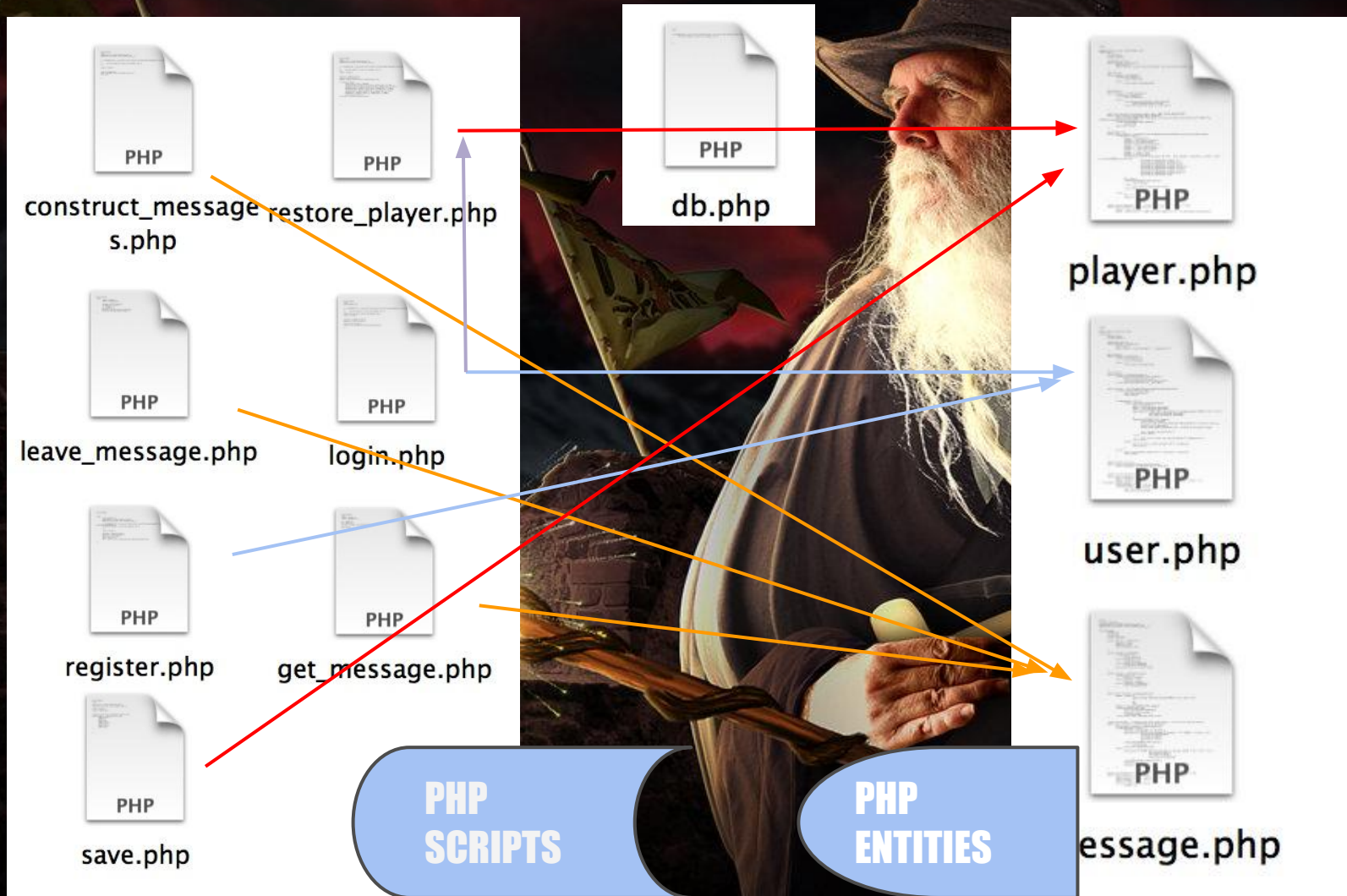
DATABASE STRUCTURE

3 main tables currently :

table_register :

server the registration and login request

table_player:

server the game player's resources

table_message:

server the message system which makes player can share experience on the game

AND MORE...

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Database & Server structure Advantages

1. Easy to read and debug

2. Easy to get understand the logic

3. Easy to implement new things and new Feature

4. Make structure nice and tidy

Main Feature 2.Login

CLIENT
login.html with javascripts

GAME

CONSTRUCT

cookies

SELECT password WHERE username=xx

OK , with uid fetched

login.php+user.php

restore_playe.phpr+player.php

SERVER
construct_message.php+ message.php

json obj

table_register

table_player

table_message

Database

SELECT * ,WHERE uid==xx

SELECT *

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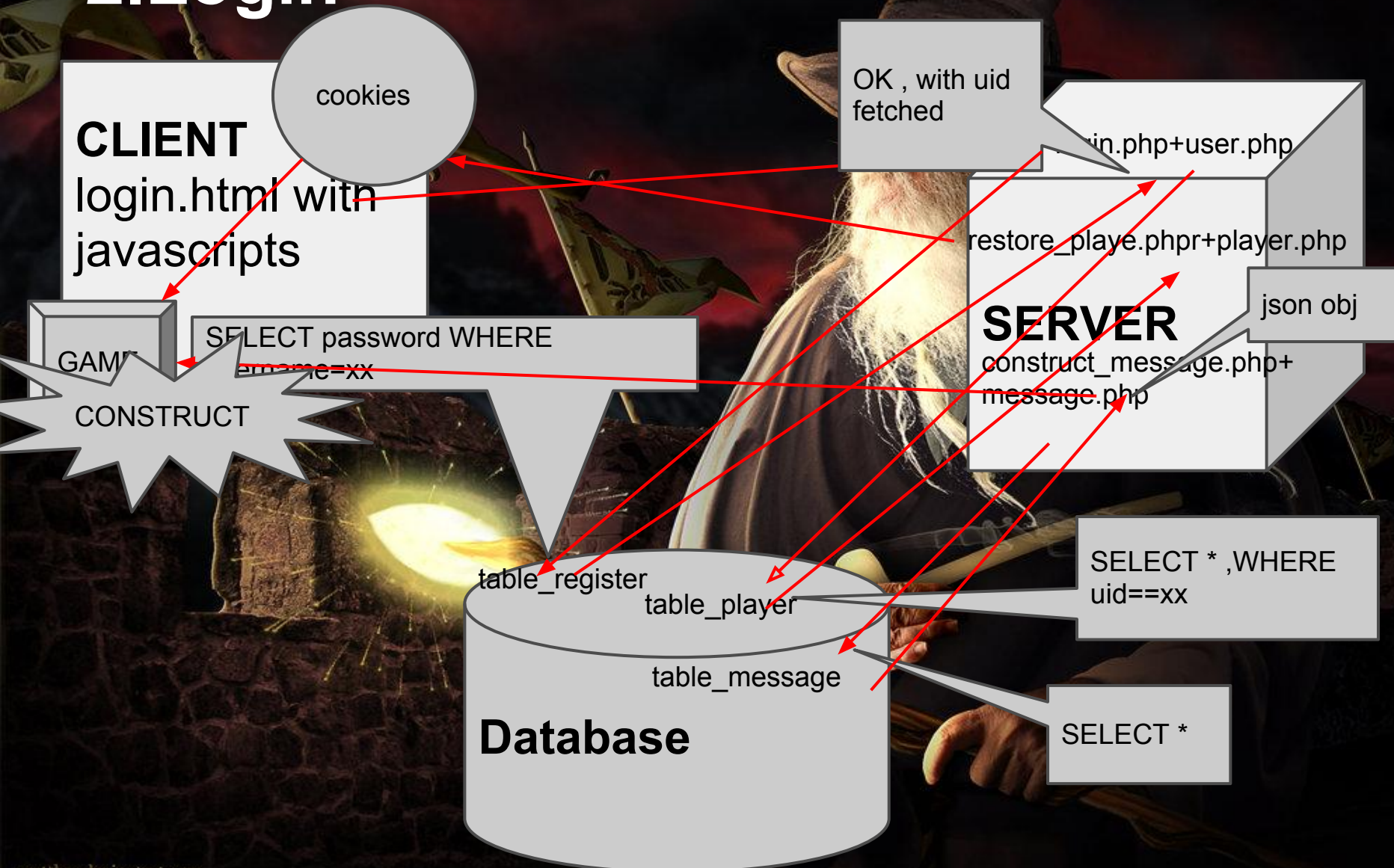
Gaming data & Saving system

CLIENT

COOKIE

move, fight, mining.. etc

GAME

save.php+player entity

SERVER

table_player

INSERT / UPDATE

Database

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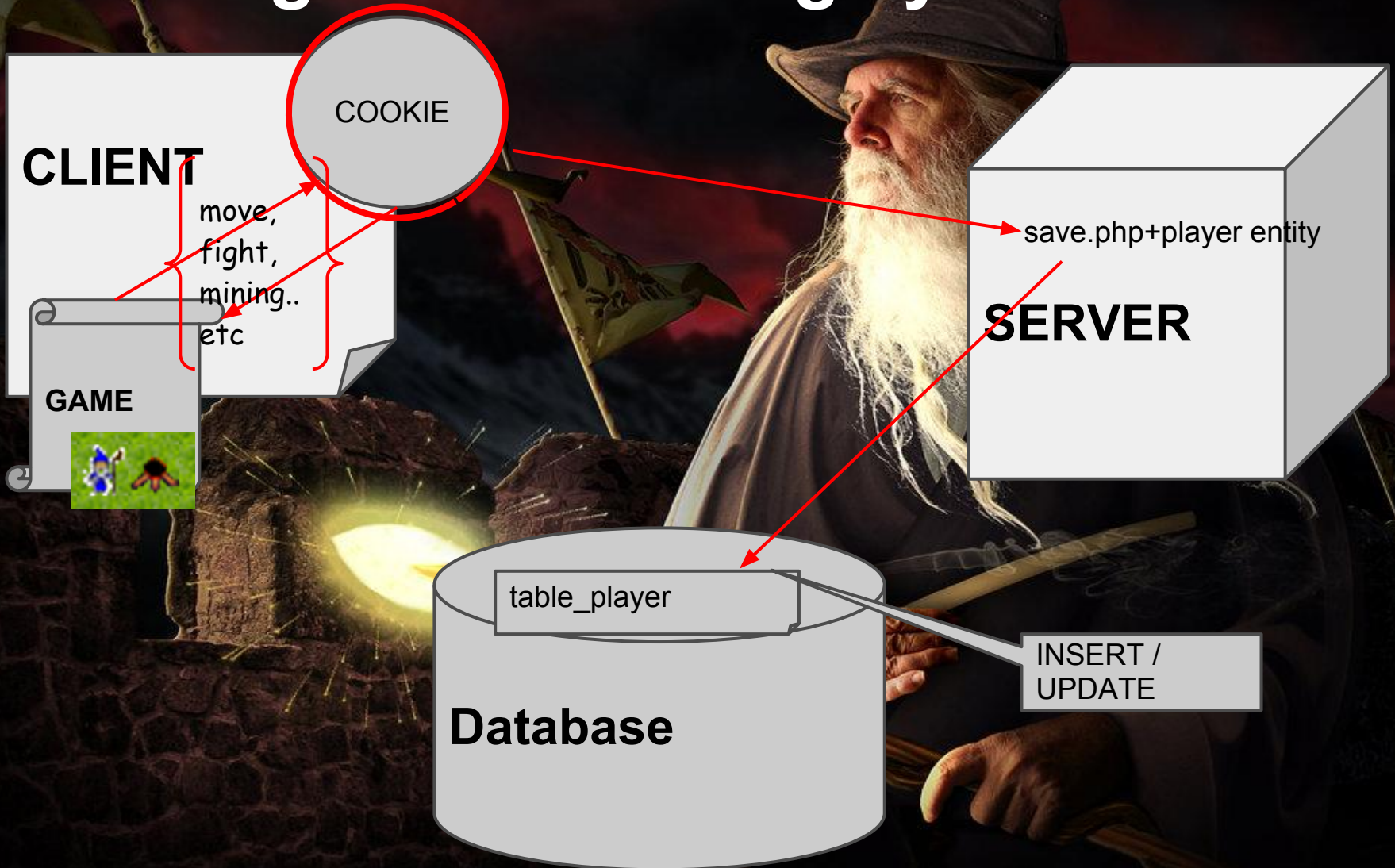
3.Global Message and communication

"lol"

"someone try o/ to me --- I beat him to death" "lol"

re[a]d!

P2

idiot.

CLIENT

GAME

P1

leave_message.php +message entity

read_message.php+message entity

SERVER

UPDATE, message++

INSERT x,y, message

"someone try o/ to me --- I beat him to death" "lol"

table_message

SELECT message WHERE x,y

Database
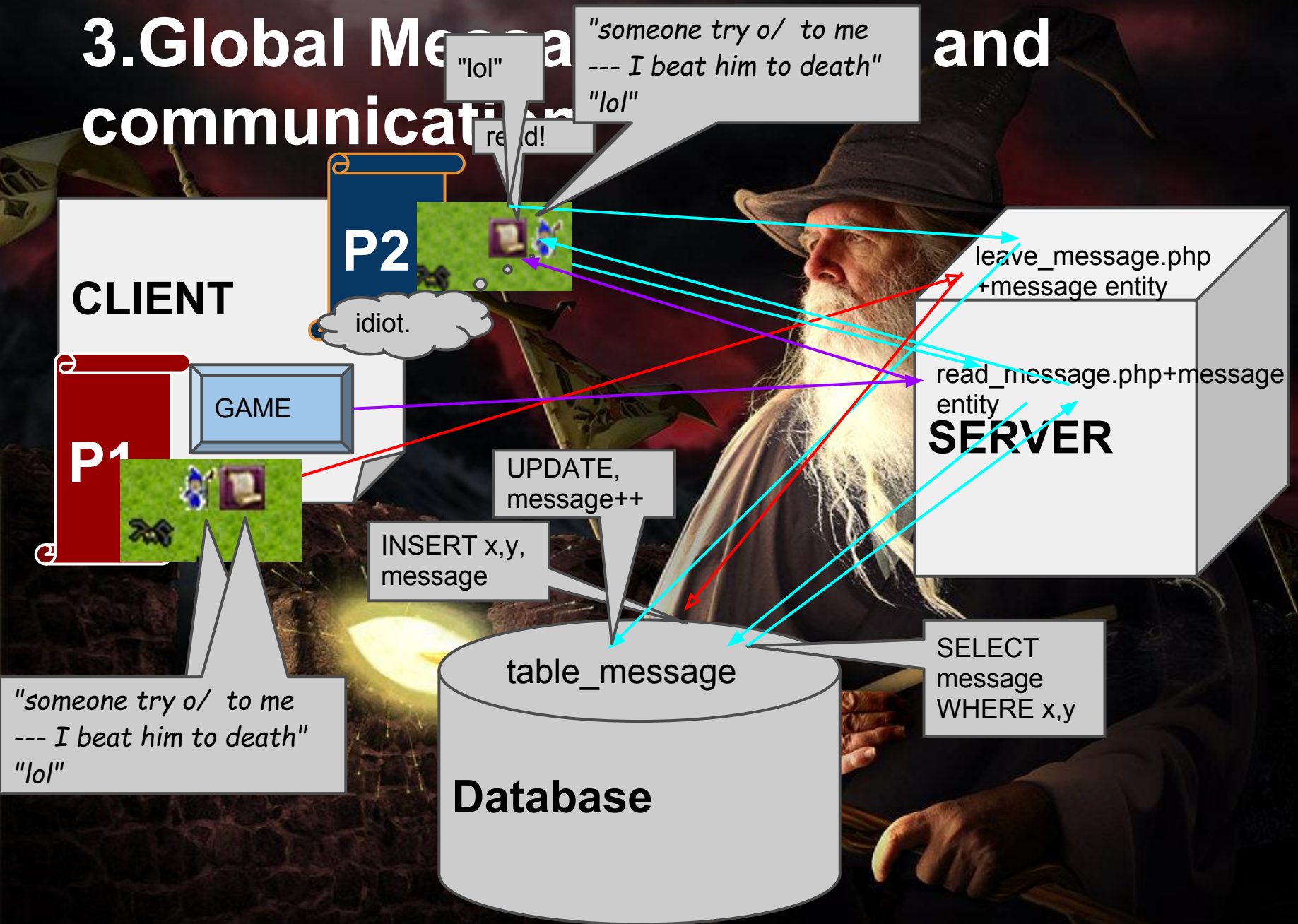
What we've accomplished

- The core features:
  - Basic interactions
  - A frame to work on later
- With some interesting feature (to work on):
  - Hidden events (traps)
  - Messaging System

What's left to do

- Class System. Importing equipments
- Player Summoning System. For trading and PvP.
- Units/Items/Spells.
- Complete Building/Tech Trees.
- Monster variation.
- Better UI/Graphics/Sounds
- Make the game actually fun to play.
- Larger and complex map with war fog
- Storyline,quests,missions

Some experiences

- Using open source tools (game engines) can gain you access to the community's wisdom. Especially when you are learning the language.
- There are sites that contain free sprites you can use.
- Set up the server as soon as you start.

Conclusion

We learned to program a functional online web-game in 2 weeks Yay!

Questions?