

```
./
.gitattributes
DejaVuSans.ttf
final_output.pdf
project_to_pdf.py
├── .git/
│   ├── .COMMIT_EDITMSG.swp
│   ├── .MERGE_MSG.swp
│   ├── COMMIT_EDITMSG
│   ├── config
│   ├── description
│   ├── FETCH_HEAD
│   ├── HEAD
│   ├── index
│   ├── ORIG_HEAD
│   └── hooks/
│       ├── applypatch-msg.sample
│       ├── commit-msg.sample
│       ├── fsmonitor-watchman.sample
│       ├── post-update.sample
│       ├── pre-applypatch.sample
│       ├── pre-commit.sample
│       ├── pre-merge-commit.sample
│       ├── pre-push.sample
│       ├── pre-rebase.sample
│       ├── pre-receive.sample
│       ├── prepare-commit-msg.sample
│       ├── push-to-checkout.sample
│       ├── sendemail-validate.sample
│       └── update.sample
└── info/
    ├── exclude
    └── logs/
        └── HEAD
            └── refs/
                ├── heads/
                │   ├── ai-vocabulary-generation
                │   ├── login-register-feature
                │   ├── main
                │   └── refactoring
                └── remotes/
                    └── origin/
                        ├── ai-vocabulary-generation
                        ├── HEAD
                        ├── login-register-feature
                        └── main
                └── objects/
                    ├── 00/
                    │   ├── 6517533656eda680c59f70d849b0342c2610e9
                    │   ├── 65b5eb3688479afe5e7cdc743f4389d60d3b77
                    │   └── 8c2718817cb0b4923aa615e7efd56180cab6f9
                    └── 01/
                        └── 7211ea4beddd40426a65f0f8287c87ead45eba
```

02/  
2bd3e3ba8789b175c86af33eefdf8f1fa57e1  
422afb5e4a3b44b4a34ccb43c118b3563a6dea  
03/  
5496e63b56af046bd1286ed29c5ad981808e1d  
05/  
0e0cc407b0a2bed50f089188e78216d6015516  
07/  
80dc3bbb5ee2ab087b8dbedbbede989869c1b  
0b/  
13cab494601d35b9fb2d93a99c5fef0916827  
0c/  
36de6d19883e217e673c077d6c4b51f842445b  
3ec5f18d760d7cd33b8e24962c1392d6ff124d  
c68ad796a26df76448bee297d9b83e6cb1c13c  
0d/  
5ca5da88199118bf964bb0d8fea0168d884d27  
11/  
1ff6bd80fcb6cbd1e74b5fe5c90682c844b667  
12/  
36808fcc97581f59d9b784f97daf5389f68e05  
13/  
5d48e11591b43dd9418c047f328bdf419f8adb  
15/  
2b8cdd9a34961d67615318d5b259cddcf674af  
16/  
2bfc2af942733303b86efacd2cbbee73eeaac9  
17/  
7854d8fb070915778ae3eada4fbca40af9d984  
1b/  
b55403fd60a518e3fa42bdcb836ecb82226750  
1c/  
28ebd2a56bc08f5d24e80b6ccafe4b0410b1f2  
4382a0c2cf21edc14e94a90ddfb25442e16cdc  
1e/  
b7aafb25731c127a3558267515efd496b698a8  
22/  
e2c6535f084532c36798012ebccfb7396d04f  
23/  
d0a34f1ea8d7133b10f2c1a11eaaebf4d21a3b  
26/  
9ecd616f3c52b067e691114397f6a47a1aee4d  
28/  
2646dc22cef2f623b14e741f1047bcab939b0  
dafb589910e2eb3c967dfcc2939d24ee1ebad4  
2c/  
91ec2ff8eb8bcee28bf8794c4341e0909dad9c  
31/  
440a23beafbc3ecfa5e906dc41a63fd95ee31b  
33/  
01408c50e49807fabd69ef0cecae3e4ab5d2b0  
16baa58dfed257815877e5ef8b48ebea0b18bf  
39/

2f51940efa0662191f84155ff6eab74f014143  
8511bc9cab44e252179209486ce68927658c3b  
| 3c/  
| b94bc5bca6344e45a1cc63f2e1cfbb4a6fe0ca  
| dc24a45aaaf813c46720f2282c40f98dd685c43  
| 3e/  
| 53aa29d8790b8bbf90d0abcd611f9e4a91a122  
| 6187a8fc255d0939ab3e20963d14dc531ed4f2  
| 41/  
| 70cf6f9ef167d036071b81ffec588c550ffd8c  
| 42/  
| cca7de0bb3bec81351e5611e30dc0e5442a4e0  
| 46/  
| 2afead77f485fd5ac57c173ef9437132456083  
| 39a08f179604d605afcaeeae4457569acffc9b  
| 4d/  
| 3b76edad07feb8e0138e399dd78a88b2f65321  
| 79767246372230f00e33b338d8aa93bf8fa7cd  
| daa9873f23907a3092c2246d79bdbb419cb065  
| 4e/  
| 16863c17a5685167067646195436938419c9be  
| 4f/  
| 9a94876c6a464dda04ea16594e8d2e70c9a8a5  
| 9bbdadff091c8e5240e8103eca70c4076d2b0b  
| 50/  
| 1067f252bd40268548a5255a9f9578e4e19a40  
| 51/  
| 5deab7629022bdb29df3e8e51d4fa08297bbb4  
| 69aca394a9c1e06f309758f82ca4db190d97ff  
| 52/  
| 764f6785dfe61ef94b8b2728c0fe194bd31c74  
| 55/  
| 0f3c8de429e081c3cbd03279e287be7350ad7e  
| 57/  
| b4ee1b0cb7c2579ad6071539e094f35da50fef  
| 58/  
| c38ffd6a49b1284b979457ea76c53dae83c280  
| 5b/  
| 14bdae48f2638c9d12fb7597593f4363c0a0fa  
| 291bf3f07780f889c7b08b90802eca31243d  
| 5e/  
| 0e0fc8da6323e9370892e3945037ca1bda9cc0  
| cd356b90c109dceae7368e3b822155c4b3b5cd  
| 64/  
| 60a5ae736675b80f63419d518f83fe6ef374aa  
| 64e285ee2f2fc61f5c2725166d2a8e572de24b  
| bd95221a20e8b52452563dd199e7eaf36e68c7  
| 66/  
| ecb3c03a75b7f634f237a71e03b4357a2d36cb  
| 68/  
| 8f8542cd75d8b043afecf52ae2e92234b0ccad  
| 69/  
| bd7a2bff2f0f5e04ec2d08ab98f2a0053a661e

bdca3633264e442360459e2449df3626e418a0  
| 6b/  
| 22ade825fd85a0f1a82f4341da5b54f5044968  
| 6f/  
| 9509c88bed7080d496fc5e1d87a9315e30549d  
| b40c70afc06dd54ca3e556a7a518e42659286c  
| 72/  
| 1cf9ff01d8da234a36006691377a3165bfe7ce  
| 74/  
| 3d61e01daa838673e0283cb01a0799aeee1d3f  
| d9690b6d4d6a1c81fb212e88a319922345f733  
| 76/  
| 045c9331dcf0c817619bbbc908074c09626900  
| 77/  
| 9d49f6b2a848dc8e2265860ec75cf2c050359d  
| 79/  
| 3c25426714ebd13e56ad01525e329624485b4f  
| 84/  
| cefba8cd023cac1784c835bd62fa3dc4f5351e  
| 85/  
| 0eddc73e06fa3f619f36f2eb541416e91b0acc  
| 86/  
| 8a637b051da6c8b101f800ab60bb68ee5ea2db  
| 87/  
| 132b042e96065ee35426f3f2085e8497269025  
| 8a/  
| c81a3c49d062a279d36018134519aed939151c  
| 8b/  
| 2820b754ab0100db9f9f1d24a585dcf82bea27  
| 8c/  
| 89f4a0309a312f33371be10898ae413c1dde41  
| 92/  
| e931572ab1c02234f243a790a2d693712f619f  
| 95/  
| 4e8ef3c7722dca22768af4eb181d3b91333bec  
| 68d7e82c8b5dd5578fa68d0798110f88f48f46  
| 96/  
| 8e433211f5c403512b39e7af9ff00f0d03b7b2  
| 97/  
| 9687755aa5345a63b4acf0b34fe8ded34e5bdf  
| 9e/  
| 0267e4e8c2f2d4d5ec6f3c809cc39da20751d2  
| ee275518aa5b6ea282f0ae616c2480f4da2d20  
| 9f/  
| 329eb66ddb57a8feaf0f61141450fe79bb85ef  
| a0/  
| d7407156d2757d82c5c700b8ce8e41a4c13100  
| a2/  
| 7f98f6b7cfae2185592a71c0b513934113fcf7  
| a3/  
| ded5cbbe298242b5f25470389c877a5a426db8  
| a6/  
| 7df1f1cc80b6d9c9b3854236986d094fa3657f

```
    |   └── a8/
    |       cf8d0ffc3caf9703078b712fdb020a2aaa474d
    |   └── ad/
    |       827407ca9956f35018ee425c8eb660bcf9e5d1
    |   └── af/
    |       54e267b39268ed512a8a72a5b3fc8dc0db0c31
    |   └── b3/
    |       d786489ece5f5deddfefec23740bfac5207af4
    |   └── b6/
    |       1b44162a4db1c9c79e5b716d7fd4fc26f506c5
    |   └── b8/
    |       2d87d49f9c2945e5292c14e261d60a401e8805
    |   └── b9/
    |       56e1b55f462147b4142f855ecf60fda2654468
    |   └── bf/
    |       053275f266be86b4f05d7283fdda9d3f032bcb
    |   └── c0/
    |       9c9c0036c9b3daeb218f6af919783035f63668
    |   └── c2/
    |       2f1993c00680e5c3b217233ea93a38d86ea610
    |   └── c4/
    |       b02c595464071d520defd1f02e55cc22b77839
    |   └── c9/
    |       119437c302d5ea6460ae9aabbb18406abe92cf
    |   └── ca/
    |       d80d4d8614cef96149bd5b9ed6f45f5ec924b4
    |       dec6ae73df79a293d2dc21eb36a978235e9dfa
    |   └── cc/
    |       31f7126189c3bbc7a6e5b50567ea9a2e4af042
    |   └── cf/
    |       2fa27a0a38dca3a2527745d2d364b339c75aa3
    |       385bd0c9bb61cbc57798f68e690af59f41d26
    |   └── d0/
    |       fccfd73aa22d04694b38e887c2b6063c45bbaf
    |   └── d5/
    |       69fbdb5c2a2b55445ca9029b340adaf4043772
    |       c017fd905c05398926d7e246b9063f9caac014
    |       f59842ca9c27376709c4b881d52e45a64232bd
    |   └── d8/
    |       184d028a8a50ee94636b82cdd5f14ae3623c12
    |   └── d9/
    |       f22f08f494e6c7850ac3180b8830f28e13e2d9
    |   └── db/
    |       9bf1250682f63d7d3a3b6aca7509b01c5d96a4
    |   └── de/
    |       b808071af217a8767e4d68d3bbf4db3d83d9dd
    |   └── df/
    |       e0770424b2a19faf507a501ebfc23be8f54e7b
    |   └── e1/
    |       2086927223f320493b805f03bc697253098143
    |   └── e2/
    |       339dbe25ebb72242b8cc74ba43b76ff88fb0fa
    |   └── e3/
```

```
356862bfd2c8e8b8a6c40557d32b20ef339f61
├── e4/
│   0fc2cd6418b97608d8c2828fc7a2b25518a622
│   ac2e5ab2a5933db12806c81b8beccb23fee0ee
└── e5/
    25e6d7839a48722c6e49a0d536a23095dae4c3
    9a4c5f4239675ff85d24af359a933bd1e13927
    babd58a1b8bb7f77f761f3f08da6465a3c1059
    f7eecce43be41ff0703ed99e1553029b849f14
└── e6/
    9de29bb2d1d6434b8b29ae775ad8c2e48c5391
└── e7/
    f08517e9939eb4981f437cf8548391625b0d26
└── ef/
    417601ddaf9e159d8540a7520b8512d777701e
    7d20c9ab4f9d933121705380f0af40cefa0554
└── f1/
    29bb3b1264fc8331504ad0e67609e88e982e11
└── f2/
    2c9cc73c7e5d34640e1058f8e09b8e315fb059
└── f5/
    1d5ff2eb7ecc32cf3bfc4b9501de4c7f5fa77
└── f6/
    ba88f6595730634e54411278dbdeca9a80127a
└── f7/
    0ecbcaec88b3e2aa5c48abf2852463864c42f3
└── f9/
    db032d3ac050aa543e3aa68f5d303cbc2443
└── fa/
    73fc3d9f539f0233f4adb62e037af956175e15
└── fb/
    b96afa731457bfdafdb646bdd1a9821ec36e40
└── fc/
    51eb38017a8b69b1c5af2a09b748fa5e1feed
└── fe/
    397c397cfe428a75b711902844caa2564196f0
    6a62b7677e12ff77b48bea916a2dbd9905f659
└── info/
└── pack/
└── refs/
    ├── heads/
    │   ai-vocabulary-generation
    │   login-register-feature
    │   main
    │   refactoring
    └── remotes/
        └── origin/
            ai-vocabulary-generation
            HEAD
            login-register-feature
            main
    └── tags/
└── config/
```

```
config.php
config.py
keys.json
__init__.py
└── __pycache__
    ├── config.cpython-311.pyc
    └── __init__.cpython-311.pyc
controller/
AuthController.php
LogoutController.php
SaveProfileController.php
SaveVocabController.php
Diagrams/
└── Activity Diagram/
    └── Login_Register Activity Diagram v0.0.png
└── Structure/
    └── LingoLoop_Project_Structure.pdf
└── Use Case/
    └── Use Case v0.0.pdf
models/
ai_vocabulary_generation.py
Database.php
Database.py
SessionManager.php
User.php
view/
dashboard.php
index.php
login.php
mama.php
register.php
select_vocab.php
setup_profile.php
welcome.php
```

## project\_to\_pdf.py

```
import os
from fpdf import FPDF
from PyPDF2 import PdfMerger

# Font file must be in the same directory as this script
FONT_PATH = "DejaVuSans.ttf"
ROOT_DIR = "." # Root directory to scan
FINAL_PDF = "final_output.pdf"

# Generate a visual folder structure as a string
def generate_structure_text(root_dir):
    structure = ""
    for dirpath, dirnames, filenames in os.walk(root_dir):
        level = dirpath.replace(root_dir, "").count(os.sep)
        indent = "    " * level + "    "
        structure += f"{indent}{os.path.basename(dirpath)}\n"

        subindent = "    " * (level + 1)
        for f in filenames:
            structure += f"{subindent}{f}\n"
    return structure

# Create a PDF from the folder structure string
def write_structure_to_pdf(text, output_file="structure.pdf"):
    pdf = FPDF()
    pdf.add_page()
    pdf.add_font("DejaVu", "", FONT_PATH)
    pdf.set_font("DejaVu", size=10)
    pdf.multi_cell(0, 5, text)
    pdf.output(output_file)
    print(f"Folder structure saved as: {output_file}")

# Convert individual code file into PDF (with filename as title)
def convert_file_to_pdf(file_path, output_path, font_file=FONT_PATH):
    try:
        with open(file_path, 'r', encoding="utf-8", errors="ignore") as f:
            content = f.read()
    except Exception as e:
        print(f"Could not read file {file_path}: {e}")
        return

    pdf = FPDF()
    pdf.add_page()
    pdf.add_font("DejaVu", "", font_file)

    # File name as PDF title
    pdf.set_font("DejaVu", size=14)
    pdf.cell(0, 10, os.path.basename(file_path), ln=True)

    # File content
    pdf.set_font("DejaVu", size=8)
```

```

pdf.multi_cell(0, 5, content)
pdf.output(output_path)
print(f"PDF created: {output_path}")

# Get all .py, .php, .html files recursively
def get_all_code_files(root, extensions=(".py", ".php", ".html")):
    collected = []
    for dirpath, _, filenames in os.walk(root):
        for f in filenames:
            if f.endswith(extensions):
                collected.append(os.path.join(dirpath, f))
    return collected

def main():
    # Step 1: Generate folder structure
    structure_text = generate_structure_text(ROOT_DIR)
    structure_pdf = "structure.pdf"
    write_structure_to_pdf(structure_text, structure_pdf)

    # Step 2: Convert all code files to individual PDFs
    code_files = get_all_code_files(ROOT_DIR)
    generated_pdfs = [structure_pdf]

    for file in code_files:
        filename = os.path.basename(file)
        output_pdf = filename + ".pdf"
        convert_file_to_pdf(file, output_pdf)
        generated_pdfs.append(output_pdf)

    # Step 3: Merge all PDFs into a single final document
    merger = PdfMerger()
    for pdf in generated_pdfs:
        if os.path.exists(pdf):
            merger.append(pdf)

    merger.write(FINAL_PDF)
    merger.close()
    print(f"Final PDF generated as: {FINAL_PDF}")

    # Step 4: Delete all temporary individual PDFs
    for pdf in generated_pdfs:
        if os.path.exists(pdf) and pdf != FINAL_PDF:
            os.remove(pdf)
            print(f"Deleted: {pdf}")

if __name__ == "__main__":
    main()

```

## config.php

```
<?php  
  
define('DB_HOST', 'localhost');  
define('DB_USER', 'root');  
define('DB_PASS', "");  
define('DB_NAME', 'lingoloop');
```

## config.py

```
DB_CONFIG = {  
    'host': 'localhost',  
    'user': 'root',  
    'password': '',  
    'database': 'lingoloop'  
}
```

`__init__.py`

## AuthController.php

```
<?php

require_once __DIR__ . '/../models/User.php';
require_once __DIR__ . '/../models/SessionManager.php';
require_once __DIR__ . '/../models/Database.php';

class AuthController {
    private User $userModel;

    public function __construct() {
        $db = Database::getInstance();
        $this->userModel = new User($db);
    }

    public function login(string $username, string $password): ?string {
        $user = $this->userModel->findByUsername($username);

        if (!$user) {
            return "User not found.";
        }

        if (password_verify($password, $user['password'])) {
            SessionManager::start($user['id'], $user['username']);

            // Provjeri da li korisnik već ima profil
            if (!$this->userModel->hasProfile($user['id'])) {
                header("Location: /lingoloop/view/setup_profile.php");

                exit();
            }
        }

        $command = "python ../app/models/ai_vocabulary_generation.py {$user['id']} 2>&1";
        $output = shell_exec($command);
        $vocab = json_decode($output, true);

        if (json_last_error() === JSON_ERROR_NONE) {
            $_SESSION['vocab_list'] = $vocab;
            header("Location: /lingoloop/view/select_vocab.php");

            exit();
        } else {
            echo "Error decoding vocabulary list.";
        }
    }

    return "Invalid credentials.";
}

public function register(string $username, string $email, string $password): ?string {
```

```
if ($this->userModel->exists($username)) {
    return "Username already taken.";
}

$created = $this->userModel->create($username, $email, $password);

if ($created) {
    // Automatski login i redirect na profil setup
    $user = $this->userModel->findByUsername($username);
    SessionManager::start($user['id'], $user['username']);
    header("Location: /lingoloop/view/setup_profile.php");
    exit();
}

return "Registration failed. Try again.";
}
}
```

## LogoutController.php

```
<?php
define('BASE_PATH', dirname(__DIR__));
require_once BASE_PATH . '/models/SessionManager.php';

SessionManager::destroy();

header("Location: /lingoloop/view/?action=login");

exit();
```

## SaveProfileController.php

```
<?php
require_once __DIR__ . '/../core/Database.php';
require_once __DIR__ . '/../core/SessionManager.php';

SessionManager::startSession();
if (!SessionManager::isLoggedIn()) {
    header("Location: /ingoloop/public/?action=login");
    exit();
}

$db = Database::getInstance();
$user_id = $_POST['user_id'] ?? null;

// Form data
$first_name = $_POST['first_name'] ?? "";
$last_name = $_POST['last_name'] ?? "";
$birth_date = $_POST['birth_date'] ?? "";
$country = $_POST['country'] ?? "";
$english_level = $_POST['english_level'] ?? "";
$learning_goal = $_POST['learning_goal'] ?? "";
$learning_time_per_day = $_POST['learning_time_per_day'] ?? "";
$learning_style = $_POST['learning_style'] ?? "";
$previous_apps = $_POST['previous_apps'] ?? "";
$interests = $_POST['interests'] ?? "";
$favorite_content = $_POST['favorite_content'] ?? "";

// Save profile
$sql = "INSERT INTO user_profiles
        (user_id, first_name, last_name, birth_date, country, english_level,
         learning_goal, learning_time_per_day, learning_style, previous_apps,
         interests, favorite_content)
       VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)";

$stmt = $db->prepare($sql);
if (!$stmt) {
    die("Prepare failed: " . $db->error);
}

$stmt->bind_param(
    "isssssssss",
    $user_id,
    $first_name,
    $last_name,
    $birth_date,
    $country,
    $english_level,
    $learning_goal,
    $learning_time_per_day,
    $learning_style,
    $previous_apps,
    $interests,
```

```
$favorite_content
);

if ($stmt->execute()) {
    // Pozovi Python skriptu
    $command = "python ../app/models/ai_vocabulary_generation.py {$user_id} 2>&1";
    $output = shell_exec($command);
    $vocab = json_decode($output, true);

    if (json_last_error() === JSON_ERROR_NONE) {
        $_SESSION['vocab_list'] = $vocab;
        header("Location: /lingoloop/view/index.php?action=select_vocab");
    } else {
        echo "Error decoding vocabulary list.";
    }
}

} else {
    echo "Error saving profile: " . $stmt->error;
}
?>
```

## SaveVocabController.php

```
<?php
require_once BASE_PATH . '/core/SessionManager.php';
require_once BASE_PATH . '/core/Database.php';

SessionManager::startSession();

if (!SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/index.php?action=login");

    exit();
}

$userId = $_SESSION['user_id'] ?? null;
$vocabList = $_SESSION['vocab_list'] ?? null;
$selectedIndexes = json_decode($_POST['selected_words'] ?? '[]');
echo $userId;
echo "2232323223";

$db = Database::getInstance();
$stmt = $db->prepare("INSERT INTO user_vocabulary
    (user_id, term, translation, date_added, last_used, points, next_review_date)
    VALUES (?, ?, ?, NOW(), NULL, 0, NOW())
");

foreach ($selectedIndexes as $index) {
    if (!isset($vocabList[$index])) continue;

    $term = $vocabList[$index][0];
    $translation = $vocabList[$index][1];

    $stmt->bind_param("iss", $userId, $term, $translation);
    $stmt->execute();
}

// Očistimo sesiju nakon unosa
unset($_SESSION['vocab_list']);

header("Location: /lingoloop/view/index.php?action=welcome");

exit();
```

## ai\_vocabulary\_generation.py

```
import sys
import os
import json
import ast
import time # dodaj import

# Podesi putanju do core/
sys.path.append(os.path.abspath(os.path.join(os.path.dirname(__file__), '..', '..')))
from models.Database import *
from groq import Groq

class AI_VOCABULARY_GENERATION:
    def __init__(self):
        self.__connection = Database.get_instance()
        self.__cursor = self.__connection.cursor()
        with open(os.path.abspath(os.path.join(os.path.dirname(__file__), '..', '..', 'config', 'keys.json')), 'r') as file:
            data = json.load(file)
            groq = data["Groq"]
        self.__client = Groq(api_key=groq)

    def getting_data_from_ab(self, id):
        query = "SELECT * FROM user_profiles WHERE user_id = %s"
        self.__cursor.execute(query, (id,))
        column_names = [desc[0] for desc in self.__cursor.description]
        resultati = self.__cursor.fetchall()

        output = ""
        for red in resultati:
            for col_name, value in zip(column_names, red):
                output += f"{col_name}: {value}\n"
        return output

    def create_vocab(self, text):
        completion = self.__client.chat.completions.create(
            model="llama-3.3-70b-versatile",
            messages=[
                {"role": "system", "content": "You are a professional teacher fluent in French."},
                {"role": "user", "content": (
                    "Hier sind detaillierte Informationen über einen Benutzer:\n\n"
                    f"{text}\n\n"
                    "Bitte generiere eine Liste von **15 anspruchsvollen englischen Vokabeln oder idiomatischen Ausdrücken**, "
                    "die besonders gut zu diesem Benutzerprofil passen.\n"
                    "Beziehe dich auf seine Interessen, Ziele und seinen Lernstil, um relevante Ausdrücke zu wählen.\n\n"
                    "**Gib für jeden Begriff Folgendes an:**\n"
                    "1. Der englische Begriff\n"
                    "2. Die passende deutsche Übersetzung **(mit Artikel bei Substantiven)**\n"
                    "3. Einen kurzen Beispielsatz auf Englisch\n\n"
                    "Format:\n"
                    "[\n"
                    " ('term1', 'Übersetzung1'),\n"
                    " ('term2', 'Übersetzung2'),\n"
                )}
            ]
        )
```

```
" ...\\n"
"]\\n\\n"
"Gib **nur** die formatierte Python-kompatible Liste zurück – ohne zusätzliche Kommentare oder Erklärungen."
)}
],
temperature=1,
max_tokens=1024,
top_p=1,
stream=True,
stop=None,
)

response_text = """join(chunk.choices[0].delta.content or "" for chunk in completion)

try:
    word_list = ast.literal_eval(response_text.strip())
    return word_list
except Exception as e:
    return []

# CLI poziv iz PHP-a
if __name__ == "__main__":
    user_id = int(sys.argv[1])
    x = AI_VOCABULARY_GENERATION()
    z = x.getting_data_from_ab(user_id)
    y = x.create_vocab(z)

    result = y

    print(json.dumps(result))# Final output
```

## Database.php

```
<?php

/**
 * Class Database
 *
 * Manages a single instance of MySQL database connection using Singleton pattern.
 */
class Database {
    private static ?mysqli $instance = null;

    /**
     * getInstance
     *
     * Returns the shared mysqli connection instance.
     *
     * @return mysqli
     */
    public static function getInstance(): mysqli {
        if (self::$instance === null) {
            require __DIR__ . '/../config/config.php';

            self::$instance = new mysqli(DB_HOST, DB_USER, DB_PASS, DB_NAME);

            if (self::$instance->connect_error) {
                die("Database connection failed: " . self::$instance->connect_error);
            }
        }

        return self::$instance;
    }

    /**
     * Private constructor to prevent instantiation.
     */
    private function __construct() {}

    /**
     * Private clone method to prevent cloning the instance.
     */
    private function __clone() {}

    /**
     * Private unserialize method to prevent restoring from string.
     */
    public function __wakeup() {}
}
```

## Database.py

```
import mysql.connector
from config.config import DB_CONFIG

class Database:
    __instance = None # klasna promenljiva

    @classmethod
    def get_instance(cls):

        if cls.__instance is None:
            cls.__instance = mysql.connector.connect(
                host=DB_CONFIG['host'],
                user=DB_CONFIG['user'],
                password=DB_CONFIG['password'],
                database=DB_CONFIG['database']
            )
        return cls.__instance

    @classmethod
    def close_connection(cls):
        if cls.__instance is not None:
            cls.__instance.close()
            cls.__instance = None
```

## SessionManager.php

```
<?php

/**
 * Class SessionManager
 *
 * Manages user sessions: start, destroy, and check login status.
 */
class SessionManager {

    /**
     * start
     *
     * Starts a new session and stores user data.
     *
     * @param int $userId
     * @param string $username
     * @return void
     */
    public static function start(int $userId, string $username): void {
        if (session_status() === PHP_SESSION_NONE) {
            session_start();
        }

        $_SESSION['user_id'] = $userId;
        $_SESSION['username'] = $username;
    }

    /**
     * destroy
     *
     * Ends the session and clears session data.
     *
     * @return void
     */
    public static function destroy(): void {
        if (session_status() === PHP_SESSION_NONE) {
            session_start();
        }

        $_SESSION = [];
        session_destroy();
    }

    /**
     * isLoggedIn
     *
     * Checks if the user is currently logged in.
     *
     * @return bool
     */
    public static function isLoggedIn(): bool {
```

```
    return isset($_SESSION['user_id']);
}

public static function startSession(): void {
    if (session_status() === PHP_SESSION_NONE) {
        session_start();
    }
}

/** 
 * getUsername
 *
 * Returns the currently logged-in username.
 *
 * @return string|null
 */
public static function getUsername(): ?string {
    return $_SESSION['username'] ?? null;
}

}
```

# User.php

```
<?php

/**
 * Class User
 *
 * Handles user-related database operations such as finding users,
 * creating new accounts, and checking for existing usernames.
 */
class User {
    private $db;
    private $table = 'users';

    /**
     * Constructor
     *
     * @param mysqli $db - MySQLi database connection object
     */
    public function __construct(mysqli $db) {
        $this->db = $db;
    }

    /**
     * findByUsername
     *
     * Finds a user by their username.
     *
     * @param string $username
     * @return array|null - Returns user data as an associative array, or null if not found
     */
    public function findByUsername(string $username): ?array {
        $sql = "SELECT * FROM {$this->table} WHERE username = ?";
        $stmt = $this->db->prepare($sql);
        $stmt->bind_param('s', $username);
        $stmt->execute();
        $result = $stmt->get_result();

        return $result->fetch_assoc() ?: null;
    }

    /**
     * create
     *
     * Creates a new user in the database.
     *
     * @param string $username - The desired username
     * @param string $email - User's email address
     * @param string $password - Raw password (will be hashed)
     * @return bool - Returns true if user was created successfully
     */
    public function create(string $username, string $email, string $password): bool {
        $hashedPassword = password_hash($password, PASSWORD_BCRYPT);
```

```
$sql = "INSERT INTO {$this->table} (username, email, password) VALUES (?, ?, ?)";
$stmt = $this->db->prepare($sql);
$stmt->bind_param('sss', $username, $email, $hashedPassword);

return $stmt->execute();
}

/** 
 * exists
 *
 * Checks whether a user with the given username already exists.
 *
 * @param string $username
 * @return bool - Returns true if the user exists
 */
public function exists(string $username): bool {
    return $this->findByUsername($username) !== null;
}

public function hasProfile(int $userId): bool {
    $sql = "SELECT 1 FROM user_profiles WHERE user_id = ?";
    $stmt = $this->db->prepare($sql);
    $stmt->bind_param('i', $userId);
    $stmt->execute();
    $stmt->store_result();

    return $stmt->num_rows > 0;
}

}
```

## dashboard.php

```
<?php
define('BASE_PATH', dirname(__DIR__));
require_once BASE_PATH . '/models/SessionManager.php';

// Check if user is logged in
SessionManager::start();
if (!SessionManager::get('user_id')) {
    header("Location: /index.php");
    exit();
}

$username = SessionManager::get('username');
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>LingoLoop | Dashboard</title>
</head>
<body>
    <h1>Welcome to LingoLoop, <?= htmlspecialchars($username) ?>!</h1>

    <p>This is your user dashboard.</p>

    <p><a href="/logout.php">Logout</a></p>
</body>
</html>
```

## index.php

```
<!DOCTYPE html>
<html lang="de">
<head>
    <meta charset="UTF-8">
    <title>Weiterleitung...</title>
    <meta http-equiv="refresh" content="0; URL=login.php">
</head>
<body>
    <p>Du wirst weitergeleitet nach <a href="login.php">login.php</a>...</p>
</body>
</html>
```

## login.php

```
<?php
define('BASE_PATH', dirname(__DIR__));

require_once __DIR__ . '/../models/SessionManager.php';
$auth = new AuthController();
if (SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/index.php?action=welcome");
    exit();
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login | LingoLoop</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <style>
        /* Reset */
        * { margin: 0; padding: 0; box-sizing: border-box; }
        body {
            background-color: #000;
            color: #fff;
            font-family: Arial, sans-serif;
            display: flex;
            align-items: center;
            justify-content: center;
            min-height: 100vh;
            padding: 20px;
        }
        .container {
            background-color: #111;
            padding: 40px;
            border-radius: 8px;
            width: 100%;
            max-width: 600px;
            box-shadow: 0 4px 8px rgba(0, 0, 0, 0.5);
            animation: fadeIn 1s ease-in-out;
        }
        @keyframes fadeIn {
            from { opacity: 0; }
            to { opacity: 1; }
        }
        h2 {
            font-size: 2rem;
            font-weight: bold;
            text-align: center;
            margin-bottom: 20px;
        }
        .form-group {
            margin-bottom: 20px;
        }
    </style>
</head>
<body>
    <div class="container">
        <h2>Welcome to LingoLoop!</h2>
        <form>
            <div class="form-group">
                <label>Email <small>(Required)</small></label>
                <input type="text" name="email" required="required" />
            </div>
            <div class="form-group">
                <label>Password <small>(Required)</small></label>
                <input type="password" name="password" required="required" />
            </div>
            <div class="form-group">
                <input type="checkbox" name="remember_me" checked="checked" /> Remember me
            </div>
            <div class="form-group">
                <input type="submit" value="Log In" />
            </div>
        </form>
        <p>Forgot your password? <a href="#">Reset it here.</p>
        <p>Don't have an account? <a href="#">Create one now.</p>
    </div>
</body>
</html>
```

```
label {
  display: block;
  font-size: 1rem;
  margin-bottom: 5px;
}

input[type="text"],
input[type="password"] {
  width: 100%;
  padding: 12px;
  border: 1px solid #333;
  border-radius: 4px;
  background-color: #222;
  color: #fff;
  font-size: 1rem;
}

button {
  width: 100%;
  padding: 15px;
  border: none;
  border-radius: 4px;
  background-color: #007BFF;
  color: #fff;
  font-size: 1.2rem;
  font-weight: bold;
  cursor: pointer;
  transition: background-color 0.3s ease;
}

button:hover {
  background-color: #0056b3;
}

p {
  font-size: 1rem;
  text-align: center;
  margin-top: 20px;
  color: #aaa;
}

a {
  color: #00f;
  text-decoration: none;
}

a:hover {
  text-decoration: underline;
}

@media (max-width: 600px) {
  .container {
    padding: 20px;
  }

  h2 {
    font-size: 1.5rem;
  }

  button {
    font-size: 1rem;
  }
}
```

```
}

</style>
</head>
<body>
<div class="container">
<h2>Login to LingoLoop</h2>
<?php if (isset($error)) echo "<p style='color:red;'>$error</p>"; ?>
<form method="POST" action="/lingoloop/view/select_vocab.php">
<input type="hidden" name="action" value="login">
<div class="form-group">
<label>Username</label>
<input type="text" name="username" placeholder="Enter your username" required>
</div>
<div class="form-group">
<label>Password</label>
<input type="password" name="password" placeholder="Enter your password" required>
</div>
<button type="submit">Login</button>
</form>
<p>Don't have an account? <a href="/lingoloop/view/register.php">Register here</a></p>
</div>
</body>
</html>
```

## mama.php

```
<html>
  <body>
    <head>sfdfdfdf</head>
    <form method="POST" action="/lingoloop/view/index.php">
      <input type="hidden" name="action" value="login">
      <div class="form-group">
        <label>Username</label>
        <input type="text" name="username" placeholder="Enter your username" required>
      </div>
      <div class="form-group">
        <label>Password</label>
        <input type="password" name="password" placeholder="Enter your password" required>
      </div>
      <button type="submit">Login</button>
    </form>

  </div>
  </body>
</html>
```

## register.php

```
<?php
define('BASE_PATH', dirname(__DIR__));
require_once BASE_PATH . '/models/SessionManager.php';

if (SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/index.php?action=welcome");
    exit();
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Register | LingoLoop</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <style>
        /* Reset */
        * { margin: 0; padding: 0; box-sizing: border-box; }
        body {
            background-color: #000;
            color: #fff;
            font-family: Arial, sans-serif;
            display: flex;
            align-items: center;
            justify-content: center;
            min-height: 100vh;
            padding: 20px;
        }
        .container {
            background-color: #111;
            padding: 40px;
            border-radius: 8px;
            width: 100%;
            max-width: 600px;
            box-shadow: 0 4px 8px rgba(0,0,0,0.5);
            animation: fadeIn 1s ease-in-out;
        }
        @keyframes fadeIn {
            from { opacity: 0; }
            to { opacity: 1; }
        }
        h2 {
            font-size: 2rem;
            font-weight: bold;
            text-align: center;
            margin-bottom: 20px;
        }
        .form-group {
            margin-bottom: 20px;
        }
    </style>

```

```
label {
  display: block;
  font-size: 1rem;
  margin-bottom: 5px;
}

input[type="text"],
input[type="email"],
input[type="password"] {
  width: 100%;
  padding: 12px;
  border: 1px solid #333;
  border-radius: 4px;
  background-color: #222;
  color: #fff;
  font-size: 1rem;
}

button {
  width: 100%;
  padding: 15px;
  border: none;
  border-radius: 4px;
  background-color: #28a745; /* zelena boja */
  color: #fff;
  font-size: 1.2rem;
  font-weight: bold;
  cursor: pointer;
  transition: background-color 0.3s ease;
}

button:hover {
  background-color: #218838;
}

p {
  font-size: 1rem;
  text-align: center;
  margin-top: 20px;
  color: #aaa;
}

a {
  color: #00f;
  text-decoration: none;
}

a:hover {
  text-decoration: underline;
}

@media (max-width: 600px) {
  .container {
    padding: 20px;
  }

  h2 {
    font-size: 1.5rem;
  }

  button {
    font-size: 1rem;
  }
}
```

```
    }
}
</style>
</head>
<body>
<div class="container">
<h2>Create an Account</h2>
<?php if (isset($error)) echo "<p style='color:red;'>$error</p>"; ?>
<form method="GET" action="/lingoloop/view/index.php">
<input type="hidden" name="action" value="register">
<div class="form-group">
<label>Username</label>
<input type="text" name="username" placeholder="Enter your username" required>
</div>
<div class="form-group">
<label>Email</label>
<input type="email" name="email" placeholder="Enter your email" required>
</div>
<div class="form-group">
<label>Password</label>
<input type="password" name="password" placeholder="Enter your password" required>
</div>
<button type="submit">Register</button>
</form>
<p>Already have an account? <a href="/lingoloop/view/?action=login">Login here</a></p>
</div>
</body>
</html>
```

## select\_vocab.php

```
<?php
require_once BASE_PATH . '/models/SessionManager.php';

SessionManager::startSession();

if (!SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/index.php?action=login");

    exit();
}

$vocabList = $_SESSION['vocab_list'];
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Select Your Favorite Vocabulary</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <script>
        let selectedWords = [];

        function toggleSelection(index, button) {
            const maxSelection = 10;
            const word = index.toString();

            const alreadySelected = selectedWords.includes(word);

            if (alreadySelected) {
                selectedWords = selectedWords.filter(w => w !== word);
                button.classList.remove('selected');
            } else {
                if (selectedWords.length >= maxSelection) {
                    alert("You can only select up to 10 words.");
                    return;
                }
                selectedWords.push(word);
                button.classList.add('selected');
            }

            document.getElementById('selectedWords').value = JSON.stringify(selectedWords);
        }
    </script>
<style>
    body { background-color: #000; color: #fff; font-family: Arial; padding: 20px; }
    .word-box { background-color: #111; margin-bottom: 10px; padding: 15px; border-radius: 8px; display: flex; justify-content: space-between; align-items: center; }
    .heart-btn { cursor: pointer; font-size: 24px; }
```

```
.selected { color: red; }

button[type="submit"] { padding: 10px 20px; margin-top: 20px; border: none; background-color: #28a745; color: white; font-size: 1.1rem; border-radius: 4px; cursor: pointer; }

</style>
</head>
<body>

<h2>Select Up to 10 Favorite Words ❤</h2>

<form method="POST" action="/lingoloop/view/index.php">
<?php foreach ($vocabList as $index => $item): ?>
    <div class="word-box">
        <div>
            <strong><?= htmlspecialchars($item[0]) ?></strong> - <?= htmlspecialchars($item[1]) ?>
        </div>
        <div class="heart-btn" onclick="toggleSelection(<?= $index ?>, this)">❤</div>
    </div>
<?php endforeach; ?>

<input type="hidden" name="selected_words" id="selectedWords" value="[]"/>
<button type="submit">Save Selected Words</button>
</form>

</body>
</html>
```

## setup\_profile.php

```
<?php
require_once BASE_PATH . '/models/SessionManager.php';

SessionManager::startSession();

if (!SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/index.php?action=login");

    exit();
}

$username = $_SESSION['username'];
$user_id = $_SESSION['user_id'];
?>
<!DOCTYPE html>
<html lang="de">
<head>
<meta charset="UTF-8">
<title>Profil-Einrichtung | LingoLoop</title>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<!-- Koristimo Alpine.js samo za navigaciju wizardom -->
<script src="https://cdn.jsdelivr.net/npm/alpinejs" defer></script>
<style>
/* Osnovni reset i stilovi */
* { box-sizing: border-box; margin: 0; padding: 0; }
body {
    background-color: #000;
    color: #fff;
    font-family: Arial, sans-serif;
    display: flex;
    align-items: center;
    justify-content: center;
    min-height: 100vh;
    padding: 20px;
}
.container {
    background-color: #111;
    padding: 20px;
    border-radius: 8px;
    width: 100%;
    max-width: 600px;
    box-shadow: 0 4px 8px rgba(0,0,0,0.5);
}
h2 { margin-bottom: 20px; text-align: center; }
.step { display: none; opacity: 0; transition: opacity 0.5s ease-in-out; }
.step.active { display: block; opacity: 1; }
.form-group { margin-bottom: 15px; }
label { display: block; margin-bottom: 5px; font-size: 0.9em; }
input[type="text"],
input[type="date"],
select,
```

```

textarea {
    width: 100%;
    padding: 10px;
    border: 1px solid #333;
    border-radius: 4px;
    background-color: #222;
    color: #fff;
    font-size: 0.95em;
}
textarea { resize: vertical; min-height: 80px; }

.nav-buttons {
    display: flex;
    justify-content: space-between;
    margin-top: 20px;
}
.nav-buttons button {
    border: none;
    padding: 10px 20px;
    border-radius: 4px;
    cursor: pointer;
    transition: background-color 0.3s;
    color: #fff;
}
#nextBtn { background-color: #28a745; } /* zelena */
#nextBtn:hover { background-color: #218838; }
#submitBtn { background-color: #dc3545; } /* crvena */
#submitBtn:hover { background-color: #c82333; }
#prevBtn { background-color: #333; }
#prevBtn:hover { background-color: #555; }
@media (max-width: 600px) {
    .nav-buttons { flex-direction: column; }
    .nav-buttons button { width: 100%; margin-bottom: 10px; }
}
</style>
</head>
<body>
<div class="container" x-data="wizard()">
    <form id="profileForm" action="/lingoloop/view/SaveProfileController.php" method="POST" onsubmit="return validateForm()">
        <input type="hidden" name="user_id" value="<?= $userId ?>">

        <!-- Step 0: Einführung -->
        <div class="step" id="step0">
            <h2>Willkommen!</h2>
            <p style="margin-bottom: 20px;">
                Um Ihnen das bestmögliche Lernerlebnis zu bieten, bitten wir Sie, einige kurze Fragen zu beantworten.  

                Ihre Antworten helfen uns, den Unterricht genau auf Ihre Interessen und Bedürfnisse abzustimmen.  

                Alle Daten sind vollständig privat und werden ausschließlich zur Personalisierung Ihres Lernens verwendet.  

                Vielen Dank für Ihre Zusammenarbeit!
            </p>
        </div>

        <!-- Step 1: Persönliche Daten -->
    </form>
</div>

```

```

<div class="step" id="step1">
    <h2>Schritt 1: Persönliche Daten</h2>
    <div class="form-group">
        <label>Vorname (z.B. "Max")</label>
        <input type="text" name="first_name" placeholder="Max" required>
    </div>
    <div class="form-group">
        <label>Nachname (z.B. "Mustermann")</label>
        <input type="text" name="last_name" placeholder="Mustermann" required>
    </div>
    <div class="form-group">
        <label>Geburtsdatum</label>
        <input type="date" name="birth_date" required>
    </div>
    <div class="form-group">
        <label>Land</label>
        <select name="country" required>
            <option value="">Bitte wählen</option>
            <option value="Deutschland">Deutschland</option>
            <option value="Österreich">Österreich</option>
            <option value="Schweiz">Schweiz</option>
            <option value="Andere">Andere</option>
        </select>
    </div>
    <div class="form-group">
        <label>Englisch Niveau (A1-C2)</label>
        <select name="english_level" required>
            <option value="">Bitte wählen</option>
            <option value="A1">A1</option>
            <option value="A2">A2</option>
            <option value="B1">B1</option>
            <option value="B2">B2</option>
            <option value="C1">C1</option>
            <option value="C2">C2</option>
        </select>
    </div>
</div>

```

```

<!-- Step 2: Lernziele -->
<div class="step" id="step2">
    <h2>Schritt 2: Lernziele</h2>
    <div class="form-group">
        <label>Warum lernen Sie Englisch? (z.B. "Für die Arbeit")</label>
        <input type="text" name="learning_goal" placeholder="Für die Arbeit" required>
    </div>
    <div class="form-group">
        <label>Wie viel Zeit pro Tag? (z.B. "20 Minuten")</label>
        <select name="learning_time_per_day" required>
            <option value="">Bitte wählen</option>
            <option value="10 Minuten">10 Minuten</option>
            <option value="20 Minuten">20 Minuten</option>
            <option value="30+ Minuten">30+ Minuten</option>
        </select>
    </div>
</div>

```

```

</div>
</div>

<!-- Step 3: Lernstil -->
<div class="step" id="step3">
  <h2>Schritt 3: Lernstil</h2>
  <div class="form-group">
    <label>Bevorzugte Lernmethode (z.B. "Vokabeln üben, Videos anschauen, Lesen, Schreiben")</label>
    <input type="text" name="learning_style" placeholder="Vokabeln üben, Videos anschauen, Lesen, Schreiben" required>
  </div>
  <div class="form-group">
    <label>Apps, die Sie bisher genutzt haben (optional)</label>
    <input type="text" name="previous_apps" placeholder="z.B. Duolingo" required>
  </div>
</div>

<!-- Step 4: Interessen & Hobbys -->
<div class="step" id="step4">
  <h2>Schritt 4: Interessen & Hobbys</h2>
  <div class="form-group">
    <label>Ihre Interessen, Hobbys und Leidenschaften</label>
    <textarea name="interests" placeholder="z.B. Fußball, Lesen, Musik (mehrere mit Komma trennen)" required></textarea>
  </div>
  <div class="form-group">
    <label>Was schauen oder hören Sie am liebsten?</label>
    <textarea name="favorite_content" placeholder="z.B. YouTube-Kanäle, Podcasts" required></textarea>
  </div>
</div>

<!-- Navigation Buttons -->
<div class="nav-buttons">
  <button type="button" id="prevBtn" onclick="prevStep()" disabled>Zurück</button>
  <button type="button" id="nextBtn" onclick="nextStep()>Weiter</button>
  <button type="submit" id="submitBtn" style="display: none;">Fertig</button>
</div>
</form>
</div>

<script>
  let currentStep = 0;
  const steps = document.querySelectorAll('.step');
  const prevBtn = document.getElementById('prevBtn');
  const nextBtn = document.getElementById('nextBtn');
  const submitBtn = document.getElementById('submitBtn');

  function showStep(index) {
    steps.forEach((step, i) => {
      step.classList.toggle('active', i === index);
    });
    prevBtn.disabled = (index === 0);
    if (index === steps.length - 1) {

```

```

nextBtn.style.display = 'none';
submitBtn.style.display = 'inline-block';
} else {
  nextBtn.style.display = 'inline-block';
  submitBtn.style.display = 'none';
}
}

function nextStep() {
  if (validateCurrentStep()) {
    if (currentStep < steps.length - 1) {
      currentStep++;
      showStep(currentStep);
    }
  }
}

function prevStep() {
  if (currentStep > 0) {
    currentStep--;
    showStep(currentStep);
  }
}

// Custom validation for current step (skip intro step)
function validateCurrentStep() {
  if (currentStep === 0) return true;
  const currentFields = steps[currentStep].querySelectorAll('input[required], select[required], textarea[required]');
  for (const field of currentFields) {
    if (!field.value.trim()) {
      alert("Bitte füllen Sie das Feld '" + field.previousElementSibling.textContent.trim() + "' aus.");
      field.focus();
      return false;
    }
  }
  return true;
}

function validateForm() {
  // Validate all steps before submitting
  for (let i = 1; i < steps.length; i++) {
    const fields = steps[i].querySelectorAll('input[required], select[required], textarea[required]');
    for (const field of fields) {
      if (!field.value.trim()) {
        alert("Bitte füllen Sie das Feld '" + field.previousElementSibling.textContent.trim() + "' aus.");
        currentStep = i;
        showStep(currentStep);
        field.focus();
        return false;
      }
    }
  }
  return true;
}

```

```
}

// Initialize first step
showStep(currentStep);
</script>
<script>
window.addEventListener("beforeunload", function () {
  navigator.sendBeacon("/lingoloop/public/logout.php");
});
</script>
</body>
</html>
```

## welcome.php

```
<?php
require_once BASE_PATH . '/models/SessionManager.php';

SessionManager::startSession();

if (!SessionManager::isLoggedIn()) {
    header("Location: /lingoloop/view/?action=login");
    exit();
}

$username = $_SESSION['username'];
?>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Welcome | LingoLoop</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <script src="https://cdn.tailwindcss.com"></script>
</head>
<body class="bg-black text-white flex items-center justify-center h-screen">

<div class="bg-gray-900 p-10 rounded-lg shadow-lg text-center max-w-md w-full">
    <h1 class="text-3xl font-bold mb-4">Welcome, <?php echo htmlspecialchars($username); ?>! </h1>
    <p class="text-gray-300 mb-6">You are successfully logged in to <span class="font-semibold text-white">LingoLoop</span>.</p>

    <a href="/lingoloop/controller/LogoutController.php" class="bg-red-600 hover:bg-red-700 transition px-6 py-2 rounded text-white font-semibold">
        Logout
    </a>
</div>

</body>
</html>
```