Topic: Moodle Assistant Author: Carlos Acevedo Morales Date: 8/29/2022

Problem Background: UPRM Students are often required to use the Moodle service for their classes. Due to current living circumstances in Puerto Rico, power outages are frequent, as well as server-side outages. A student that would be in any of these situations is unable to access any course documents or resource.

This problem hinders the academic prowess of the students even more than before, due to the course materials being available mostly using Moodle. While a student can circumvent this problem by downloading everything available to their device, this task can be a hassle as they would have to download everything one by one and organize the files themselves.

# Target:

- Create a tool that will allow students to more efficiently navigate and utilize moodle
- Provide a way that students can create their own offline repository for all of their classes
- Inform users about the current Moodle server status (offline or online).
- Integrate different quality of life features to ease with some actions taken through Moodle.

### Causes:

#### Problem:

Moodle often times is unreliable given current living circumstances in Puerto Rico.

## Why:

Puerto Rico suffers from frequent power outages.

UPRM has a consistent history of Moodle outages.

Unforseen circumstances such as problems with Internet Service Providers may affect Moodle's availability.

Users with particularly slow internet may have a hard time accessing moodle.

### Countermeasures:

- Utilize the Moodle API to automate the mass download of the materials for each course.
- Provide an offline version of the calendar so that students do not have to be connected to the internet to be able to view upcoming course events.
- Allow users to see if Moodle is currently offline due to server-side issues. (To avoid confusion)
- Allow a platform that would serve as a fully-offline Moodle interface that would periodically update when the user has an internet connection.

### Check/Evaluate:

- Students will not need an active internet connection to access their courses.
- Students can now check with ease if Moodle is down for everyone.
- Students with slow internet connection will only need to proceed with the initial large download as
  opposed to the slow connection every time they wish to access some material.
- Students that suffer through power outages can still keep up with their course material and assignments offline.

### Act/Standardize:

Work on a user-friendly interface that students of every department can use. Think about features that can help the faculty such as professors use the tool as well.

Provide a news corner for students to be up to date with general events concerning UPRM.

Work on ways to efficiently use the storage space available.