

ABSTRACT

This internship report describes the development of the Open Charge Point Protocol (OCPP) module for the public electric vehicle charging station (SPKLU) management system. OCPP is an open communication protocol to connect SPKLU with various software. The OCPP module developed in this internship is useful for handling server-side operations, ensuring seamless communication between the client and server. The development process involves designing and implementing APIs that will be required on the front-end interface. This back-end module was built using the prototype method, literature studies that support problem solving, as well as the Unified Modelling Language (UML) to visualize user interaction with the system. The software used to build this back-end module uses Node.js and Express with the OCPP 1.6 protocol standard. This module allows SPKLU to communicate with the server via WebSocket. And there is also a REST API to manage SPKLU remotely which will later be used in web applications. The test results using Postman, show that the implementation of the OCPP module and API is in accordance with the criteria.

Keywords: OCPP, back-end, management system, SPKLU, electric vehicle.