

## ABSTRACT

Cardiovascular diseases (CVDs) have killed more people than cancer and respiratory disease combined together and are responsible for 32% of death worldwide. Heart failure (HF) is one of the types in CVDs that commonly occurs in older people. This type of disease cannot be fully cured, therefore the patients have to always maintain their health condition. To support the self-management system, i3L team together with Lira Medika Hospital created a “Kembali Sehat” mobile application that consists of several features, including the automated scheduled booking to help in self-maintenance of the HF patients. The application was made using XAMPP, composer, Node.js, code editor, Arduino, Lumen, MySQL, Vue.js, Nuxt.js, Axios, and MariaDB 15 application based on the SDLC waterfall system. The data were obtained from the Lira Medika database through API end-point to create the doctor appointment. The automated scheduling menu was successfully developed in the beta testing version for the “Kembali Sehat” application. This feature was created to increase the patient consultation rate. Regular consultations with doctors will increase patient awareness of their disease, help to relieve symptoms, and manage their health. In addition to that, some video contents were also made to increase the understanding of the HF patients.

**Keywords:** *CVDs, heart failure, self-management, mobile application, automated doctor scheduling.*