ABSTRACT

REST API DEVELOPMENT FOR DRUG CLEAN VILLAGE APPLICATION USING EXPRESSJS FRAMEWORK WITH SCRUM METHOD (CASE STUDY: NATIONAL NARCOTICS AGENCY BANYUMAS DISTRICT)

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The Banyumas Regency National Narcotics Agency (BNNK) has responsibility for preventing, eradicating, abuse and illicit trafficking of drugs in the Banyumas Regency area by implementing the Drug Clean Village (Bersinar Village) program. In carrying out the Bersinar Village activities, the Banyumas BNNK still does it manually, namely filling out forms that still use paper, forming anti-drug volunteers and determining the vulnerability of drug-prone areas that are not yet systemized. Based on these problems, the author aims to develop a backend with Rest API results for a drug-free village application. Rest API development will use the Scrum method with the ExpressJs framework. So that this development can run as expected, testing will be carried out on the Rest API with whitebox testing and blackbox testing. The first sprint was carried out for 2 weeks on July 24, 2023 – August 6, 2023, with 17 product backlogs and a total of 60 hours of planned story points with 60 hours of actual story points. The Second Sprint will be implemented for 2 weeks on August 14, 2023 – August 27, 2023, with 22 product backlogs and a total of 60 hours of planned story points with 60 hours of actual story points. The results of each sprint produce a Rest API for each feature to be developed. Planned story points and actual story points will produce a burndown chart for each sprint to see the work process during the sprint. This research was carried out according to the planned time and the Rest API can be applied to frontend and mobile development for drug-free village applications. Performance testing of the Rest API for mapping drug-prone areas resulted in a time of 231.4 milliseconds on 100 indicator data.

Keywords: Drugs, National Narcotics Agency, Drug Free Village, Scrum, ExpressJS, Whitebox testing, Blackbox testing