

CHAPTER V

CONCLUSION

5.1 Conclusion

Based on the research and discussion that has been presented, the following conclusions can be concluded as:

1. The iOS-Based Amikom Online Exam application can facilitate prospective applicants for the Yogyakarta Amikom University entrance exam without having to come directly to the exam location.
2. MVVM architecture can provide good performance in terms of CPU usage, memory usage, and execution time. Based on the test results in table 4.7 .
3. The MVVM architecture can lighten the logic load found in other architectures, especially MVC and MVP.
4. Based on the testing process using the MVVM architecture, the fastest process based on time execution is Display a history of an exam including score, date, etc. With an average time of 0.782 ms. But the CPU percentage used tends to be higher at 15.1%.
5. Meanwhile, the Submit answer process including the images and audio record is the process with the highest time execution, with an average execution time of 7.678 ms. This is reasonable because the process uploads text, images, and audio.
6. Based on the test case above, the Edit user data by changing name or telephone number process consumes the largest CPU percentage with a value of 20.2% which tends to be high compared to other processes, where the average is 14.28%.
7. In all the processes of test cases, Do face recognition test case for making sure that the user is matched, it consumes the largest memory compared to the others processes of 31.67 mb.

5.2 Suggestion

Based on the conclusions above, from this research it can be suggested several things for those who want to research or develop this research, they can make additions or changes as follows :

1. Usage of design patterns if needed to improve code structure and performance such as using the coordinator pattern to control the navigation of each view controller.
2. Using a different approach to handle user interface. Like using Texture, a third party tools for handling asynchronous user interface.

The author realizes that there are still many shortcomings and weaknesses in the Amikom Online Exam application, therefore the author will accept and be very grateful for all the criticism and suggestions given for the development of this application to make it even better.

