



**SnapCoding: A Customizable Avatar-Integrated Website for Fun
and Effective Learning of Python Programming**

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SnapCoding: A Customizable Avatar-Integrated Website for Fun and Effective Learning of Python Progra - 2/3/2025

M. Ari Sasmoko

SnapCoding: A Customizable Avatar-Integrated Website for Fun and Effective Learning of Python Programming
By M. Ari Sasmoko 001202000147 A Final Project Submitted to the Faculty of Computer Science President University in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Informatics Study Program Cikarang, Bekasi, Indonesia January 2025 Copyright By M. Ari Sasmoko 2025 SnapCoding: A Customizable Avatar-Integrated Website for Fun and Effective Learning of Python Programming By M. Ari Sasmoko 001202000147 Approved: Rosalina, S.Kom., M.Kom. Thesis Advisor Rosalina, S.Kom., M.Kom. Program Head of Informatics Dr. Adhi Setyo Santoso, ST., M.BA, Dean of Faculty of Computer Science STATEMENT OF ORIGINALITY In my capacity as an active student at President University and as the author of the final project stated below: Name: M. Ari Sasmoko Student ID number: 001202000147 Study Program: Informatics Faculty: Computer Science I hereby declare that my final project entitled "SnapCoding: A Customizable Avatar-Integrated Website for Fun and Effective Learning of Python Programming" is to the best of my knowledge and belief, an original piece of work based on sound academic principles. If there is any plagiarism detected in this final project, I am willing to be personally responsible for the consequences of these acts of plagiarism and will accept the sanctions against these acts in accordance with the rules and policies of President University. I also declare that this work, either in whole or in part, has not been submitted to another university to obtain a degree. Cikarang, 2025 M. Ari Sasmoko SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST As an academic community member of the President's University, I, the undersigned: Name: M. Ari Sasmoko Student ID number: 001202000147 Study program: Informatics for the purpose of development of science and technology, certify, and approve to give President University a non-exclusive royalty-free right upon my final report with the title: "SnapCoding: A Customizable Avatar-Integrated Website for Fun and Effective Learning of Python Programming" With this non-exclusive royalty-free right, President University is entitled to converse, to convert, to manage in a database, to maintain, and to publish my final report. There are to be done with the obligation from President University to mention my name as the copyright owner of my final report. This statement I made in truth. Cikarang, 2025 M. Ari Sasmoko ADVISOR APPROVAL FOR JOURNAL/INSTITUTION'S REPOSITORY As an academic community member of the President's University, I, the undersigned: Name: Cutifa Safitri ID number:

ABSTRACT

SnapCoding is a final project that aims to develop a python programming language learning website that combines it with gamification elements, namely avatar personalization and quizzes with prizes. This website is designed to provide users with a fun and effective learning experience, focuses on a website-based learning approach and can motivate users to continue learning.

The SnapCoding website provides a series of easy to understand python tutorials for beginners, from basic to advanced concepts. This tutorial is provided with clear explanations and is also easy to understand with relevant code examples. Apart from that there is also a quiz, users can use to test how far their ability to understand learning the Python programming language is. SnapCoding is a website that have a lot of feature on of them is the ability to personalize avatars by changing their clothing, hair and even styles. Users can also choose and buy accessories, clothings and other attributes using the coins they earns from the quizzes they takes. Avatars customization aims to provide a fun personalized experience for users and as additional motivation to complete available tutorials and quizzes.

With SnapCoding, it is hoped that users can learn the Python programming language in a way that is more interesting, can motivate, and strengthens their understanding through the features SnapCoding provides. Therefore, this website has the goal of creating a learning environment that is fun, effective and can increase user interest in learning the Python programming language.

Keywords: SnapCoding, Python, programming, interactive websites, tutorials, quizzes, avatar customization.

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