

**PENGEMBANGAN *GAME* EDUKASI *COMPUTATIONAL THINKING*  
UNTUK SISWA SEKOLAH DASAR**

SKRIPSI

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar Sarjana  
Pendidikan pada program studi Pendidikan Sistem dan Teknologi Informasi



oleh

Nadila Puspita Nuryadi

NIM.1900109

PROGRAM STUDI  
PENDIDIKAN SISTEM DAN TEKNOLOGI INFORMASI  
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UNIVERSITAS PENDIDIKAN INDONESIA

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OLEH  
Nadila Puspita Nuryadi

Sebuah skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh gelar  
Sarjana di Universitas Pendidikan Indonesia Kampus Purwakarta

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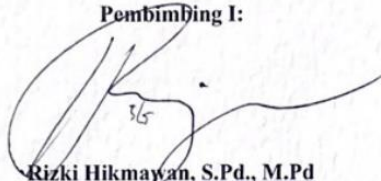
LEMBAR PENGESAHAN

NADILA PUSPITA NURYADI

PENGEMBANGAN *GAME* EDUKASI *COMPUTATIONAL THINKING* UNTUK  
SISWA SEKOLAH DASAR

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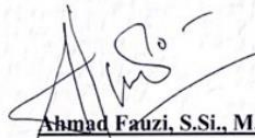
Pembimbing I:



Rizki Hikmawan, S.Pd., M.Pd

NIP. 920171219880731101

Pembimbing II:



Ahmad Fauzi, S.Si., M.T

NIP. 920171219820915101

Mengetahui,

Ketua Program Studi S1 PSTI



Ir. Nuur Wachid Abdul Majid, S.Pd., M.Pd

NIP. 920171219910625101

# **PENGEMBANGAN *GAME* EDUKASI *COMPUTATIONAL THINKING* UNTUK SISWA SEKOLAH DASAR**

## **ABSTRAK**

Nadila Puspita Nuryadi – nadilapspta@upi.edu

Perkembangan teknologi yang semakin masif merupakan tanda bahwa kehidupan saat ini telah memasuki abad-21 sejalan dengan itu keterampilan yang dibutuhkan pun berubah, keterampilan 4Cs (kreativitas, komunikasi, berpikir kritis, dan kolaborasi) merupakan keterampilan mutlak yang harus dikuasai pada abad-21, keterampilan ini haruslah masuk kedalam dunia pendidikan, agar siswa dapat bersaing di masa mendatang, lalu untuk mendukung keterampilan tersebut maka perlu adanya penerapan *computational thinking*. Untuk mengenalkan *computational thinking* siswa maka diperlukan media yang menyenangkan dan tidak membosankan seperti adanya pengembangan *game* edukasi *computational thinking*. Penelitian ini bertujuan untuk mengembangkan produk dalam rangka mengenalkan *computational thinking* kepada siswa Sekolah Dasar juga untuk mengetahui kelayakan produk. Penelitian ini menggunakan metode research and development (R&D) dengan menggunakan metode pengembangan ADDIE (*Analyze, Design, Development, Implementation and Evaluation*). Penelitian ini menghasilkan sebuah aplikasi *game* edukasi *computational thinking* berbasis android. Sebelum diujikan kepada sampel, produk di validasi oleh ahli. Validasi dilakukan oleh ahli materi dengan persentase 96% dan ahli media dengan persentase 83% hal ini menyatakan bahwa produk layak digunakan. Hasil pengujian ini dilakukan dengan beta testing dengan metode perhitungan *System Usability Scale* (SUS) dengan perolehan skor sebesar 93. Dengan adanya produk ini diharapkan siswa bisa belajar sambil bermain dan perlahan mengenal *computational thinking* agar kedepannya bisa memiliki kemampuan *critical thinking* dan *problem solving* yang baik.

**Kata kunci** : 4Cs, *computational thinking*, *game* edukasi

***DEVELOPMENT COMPUTATIONAL THINKING EDUCATION GAME  
FOR ELEMENTARY SCHOOL STUDENT***

***ABSTRACT***

Nadila Puspita Nuryadi – nadilapspta@upi.edu

The increasingly massive development of technology is a sign that today's life has entered the 21st century as the skills needed change, 4C skills (creativity, communication, critical thinking and collaboration) are the latest skills that must be mastered in the 21st century, these skills must enter the world of education, so that students can compete in the future, then to support these skills it is necessary to apply computational thinking. To introduce students to computational thinking, fun and not boring media are needed, such as the development of computational thinking educational games. This study aims to develop products in order to introduce computational thinking to elementary school students as well as to determine product feasibility. This research uses the research and development (R&D) method using the ADDIE development method (Analyze, Design, Development, Implementation and Evaluation). This research produces an Android-based computational thinking educational game application. Before being tested on samples, the product is validated by experts. Validation was carried out by material experts with a proportion of 96% and media experts with a proportion of 83%, this stated that the product was feasible to use. The results of this test were carried out by beta testing with the System Usability Scale (SUS) calculation method with a score of 93. With this product it is hoped that students can learn while playing and slowly get to know computational thinking so that in the future they can have good critical thinking skills and problem solving.

**Keywords :** 4Cs, *computational thinking, education game*

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