

**ABSTRAK**  
**PENGEMBANGAN APLIKASI BUKU DIGITAL INTERAKTIF (BUDIN)**  
**BERBASIS *ANDROID* MATERI SISTEM KOORDINAS**  
**UNTUK SISWA KELAS XI**

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Media sangat penting dalam proses pembelajaran di sekolah. Penggunaan media buku cetak kurang digemari oleh siswa karena gambar yang dimuat kurang mendukung dan keterangan tulisan pada gambar terkadang kurang jelas sehingga membuat siswa enggan membaca buku. Berdasarkan permasalahan yang dijumpai di sekolah tersebut, maka penelitian ini bertujuan untuk membuat desain serta mengetahui kelayakan aplikasi Buku Digital Interaktif (BUDIN) berbasis *android* materi sistem koordinasi untuk siswa kelas XI.

Jenis penelitian ini adalah *Research and Development*. Analisis kebutuhan dilakukan di SMA N 2 Klaten, SMA N 1 Jogonalan, SMA N 1 Banguntapan dan SMA N 1 Sedayu. Metode pengembangan dilakukan 5 tahapan dan 10 tahapan Borg & Gall dalam Sugiyono meliputi: 1) potensi dan masalah, 2) pengumpulan data, 3) rancangan produk, 4) Validasi ahli materi dan ahli media dan 5) revisi desain. Validasi produk dilakukan oleh 1 ahli media, 1 ahli materi dan 2 guru.

Produk yang dihasilkan adalah media pembelajaran berbasis aplikasi *android* berupa buku digital interaktif bernama BUDIN. BUDIN memiliki ukuran 89 MB dapat dibagikan melalui *Whatsapp* ataupun email dan dapat langsung di-*install* dengan tipe *smartphone Android*. Aplikasi ini berisi materi sistem koordinasi yang dilengkapi gambar dan video pendukung, serta LKPD dan TTS *online*. Hasil validasi menunjukkan kualitas produk BUDIN memperoleh skor rata-rata 3,13 dengan kategori baik. Aplikasi BUDIN layak diuji coba terbatas dengan revisi sesuai saran validator.

**Kata Kunci:** media pembelajaran, *Research and Development*, materi system koordinasi buku digital interaktif, berbasis aplikasi.

## ABSTRACT

### ***DEVELOPMENT OF INTERACTIVE DIGITAL BOOK (BUDIN) BASED ON ANDROID TO TEACH COORDINATION SYSTEM MATERIALS FOR 11<sup>TH</sup> GRADE STUDENTS***

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*Media is very important in the learning process at school. The use of printed book media is less favored by students because the images contained are less supportive and the written descriptions on the images are sometimes unclear, making students reluctant to open the book. Based on the problems encountered in the school, this study aims to design and determine the quality and feasibility of interactive digital books (BUDIN) based on the android of coordination system materials for 11<sup>th</sup> grade students.*

*This type of research is Research and Development. The needs analysis was conducted at SMA N 2 Klaten, SMA N 1 Jogonalan, SMA N 1 Banguntapan and SMA N 1 Sedayu. The development method carried out in 5 stages and 10 stages by Borg & Gall in Sugiyono includes: 1) potential and problems, 2) data collection, 3) product design, 4) validation of material experts and media experts and 5) design revision. Product validation was carried out by 1 media expert, 1 material expert and 2 teachers. The purpose of validation is to determine the quality of the product.*

*The resulting product is an android application-based learning media in the form of an interactive digital book called BUDIN. BUDIN has a size of 89 MB, can be shared via Whatsapp or email and can be directly installed with any type of Android smartphone. This application contains regulatory system materials with supporting pictures and videos, as well as online LKPD and TTS. The validation results show that BUDIN's product quality has an average score of 3.13 in the good category. The BUDIN application deserves a limited trial with revisions according to the validator's suggestions.*

*Keywords: learning media, Research and Development, coordination system, interactive digital books, application-based.*