

**PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS ANDROID PADA
MATA PELAJARAN JARINGAN DASAR KELAS X DI SMK
MUHAMMADIYAH 1 YOGYAKARTA**

Oleh:

Bramantyo Bayu Kusumo

NIM. 11520244042

ABSTRAK

Penelitian ini bertujuan untuk 1) mengembangkan media pembelajaran jaringan dasar berbasis *Android* untuk siswa TKJ kelas X SMK Muhammadiyah 1 Yogyakarta; dan 2) mengetahui tingkat kelayakan dari media pembelajaran tersebut.

Penelitian ini menggunakan pendekatan penelitian dan pengembangan (R&D) dengan mengadaptasi model pengembangan ADDIE, yaitu *analysis*, *design*, *development*, *implementation*, dan *evaluation*. Teknik pengumpulan data menggunakan metode kuesioner atau angket dengan subjek penelitian siswa kelas X TKJ di SMK Muhammadiyah 1 Yogyakarta.

Berdasarkan hasil penelitian diketahui bahwa: 1) pengembangan media pembelajaran berbasis *Android* telah sesuai dengan kompetensi dasar mata pelajaran jaringan dasar; 2) media pembelajaran layak digunakan pada berbagai versi *Android* mulai dari *JellyBean*, *KitKat*, *Lollipop*, *Marshmallow*, *Nougat*, *Oreo*, hingga *Pie* yang dibuktikan oleh hasil uji coba menggunakan *AWS Device Farm*; dan 3) hasil pengujian pengguna mendapatkan persentase kelayakan berdasarkan kriteria kandungan kognitif sebesar 83,65%, ruang pengetahuan dan penyajian informasi sebesar 82,16%, kemudahan penggunaan dan navigasi sebesar 82,44%, integrasi media sebesar 77,45%, estetika sebesar 81,18%, dan fungsi keseluruhan sebesar 81,76%.

Kata kunci: pengembangan, media pembelajaran, jaringan dasar, *Android*.

**DEVELOPMENT OF ANDROID BASED LEARNING MEDIA FOR BASIC
COMPUTER NETWORK COURSE AT CLASS X SMK MUHAMMADIYAH 1
YOGYAKARTA**

Written by:

Bramantyo Bayu Kusumo

NIM. 11520244042

ABSTRACT

This study aims to 1) develop an Android based learning media for basic computer network course at class X TKJ SMK Muhammadiyah 1 Yogyakarta; and 2) know the eligibility of the learning media that have been developed.

This study uses a research and development (R&D) approach by adapting the ADDIE development model, that stand for analysis, design, development, implementation, and evaluation. Data collection techniques using questionnaires with research subjects students at Class X TKJ SMK Muhammadiyah 1 Yogyakarta.

Based on the results of the study note that: 1) the development of Android based learning media for basic computer network course at class X TKJ SMK Muhammadiyah 1 Yogyakarta; 2) learning media is suitable for use on various Android versions ranging from JellyBean, KitKat, Lollipop, Marshmallow, Nougat, Oreo, to Pie as evidenced by the results of trials using AWS Device Farm; and 3) user test results get a percentage of eligibility based on the criteria of cognitive load of 83.65%, knowledge space and information presentation of 82.16%, ease of use and navigation by 82.44%, media integration by 77.45%, aesthetics of 81.18%, and overall function of 81.76%.

Keywords : development, learning media, basic computer network, android.