

***INTELLIGENT TUTORING SYSTEM DENGAN CASE BASED
REASONING***

SKRIPSI

Diajukan untuk Memenuhi Sebagian dari
Syarat Memperoleh Gelar Sarjana Komputer
Program Studi Ilmu Komputer



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ALAM
UNIVERSITAS PENDIDIKAN INDONESIA
2019**

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Sebuah skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Sarjana pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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Universitas Pendidikan Indonesia

Januari 2019

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INTELLIGENT TUTORING SYSTEM DENGAN CASE BASED REASONING

ABSTRAK

Berbagai pembelajaran yang berbasis teknologi informasi sekarang ini sudah banyak pula dimanfaatkan, misalnya pembelajaran berbasis computer dengan memanfaatkan teknologi internet atau sering disebut sebagai pembelajaran jarak jauh (*e-learning*), sehingga proses belajar dapat dilakukan kapan saja tanpa terikat ruang dan waktu. Diperlukan sebuah upaya untuk menciptakan pembelajaran yang interaktif dengan harapan pembelajaran dapat lebih optimal. Sehingga dapat memberikan kesempatan kepada siswa untuk berkreasi dan belajar mandiri. Penelitian ini dilakukan untuk membangun suatu *Intelligent Tutoring System* dengan menggunakan *Case Based Reasoning* yang dapat memberikan pengalaman baru dari kasus-kasus yang ada sebelumnya. Penggunaan *case based reasoning* memiliki kemudahan dalam representasi kasus karena hanya menggunakan dua komponen yaitu problem dan solution. Bagian problem akan berisi seluruh permasalahan dan bagian solution akan berisi seluruh penyelesaian. Ada pendekatan yang digunakan untuk melakukan perhitungan kesamaan yaitu pendekatan jarak *dengan Euclidean distance*. Apabila solusi tersebut telah memenuhi persyaratan maka solusi yang telah didapat tersebut akan digunakan untuk memecahkan masalah yang sedang dihadapi. Data dengan nilai kedekatan *Euclidean distance* terkecil akan diambil sebagai solusi baru.

Kata Kunci: *Intelligent Tutoring System, Case Based Reasoning, Euclidean Distance*

INTELLIGENT TUTORING SYSTEM USING CASE BASED REASONING

ABSTRACT

Various lessons based on information technology are now widely used, for example computer-based learning by utilizing internet technology or often referred to as distance learning (e-learning), so that the learning process can be done anytime without bound by space and time. An effort is needed to create interactive learning in the hope that learning can be optimized. So as to provide opportunities for students to create and learn independently. This research was conducted to build an Intelligent Tutoring System by using Case Based Reasoning which can provide new dives from previous cases. The use of case-based reasoning is easy in case representation because it uses only two components, namely problem and solution. The problem section will contain all the problems and the solution section will contain the entire solution. Testing shows that the level of system accuracy depends on the number of cases stored in the case database. The more cases that are stored will increase the level of system accuracy.

Keywords: *Intelligent Tutoring System, Case Based Reasoning, Euclidean Distance*

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