Coding *text mining* dan *cosine similarity*

$this->form\_validation->set\_data($this->post());

$this->form\_validation->set\_rules("message", "Pesan Aspiarsi", "required|min\_length[5]");

$this->form\_validation->set\_rules("user\_id", "Id User ", "required|min\_length[4]");

$this->form\_validation->set\_rules("kec\_id", "Id Kecamatan", "required|min\_length[4]");

if ($this->form\_validation->run()) {

$sentence = $this->post('message');

/\*\*

\* Tokenizing

\*/

$stopWordRemoverFactory = new \Sastrawi\StopWordRemover\StopWordRemoverFactory();

$stopword = $stopWordRemoverFactory->createStopWordRemover();

$outputstopword = $stopword->remove($sentence);

/\*\*

\* Stemming

\* proses menghilankan kata awal dan akhir

\*/

$stemmerFactory = new \Sastrawi\Stemmer\StemmerFactory();

$stemmer = $stemmerFactory->createStemmer();

$outputstemmer = $stemmer->stem($outputstopword);

/\*\*

\* load model komisi

\* mengambil label setiap komisi

\*/

$this->load->model("komisi\_m");

$this->load->helper("cosine\_helper");

//menjadikan array Aspirasi setelah di Text Mining

$array = preg\_split('/[^[:alnum:]]+/', strtolower($outputstemmer));

$arr\_textmining = [];

foreach ($array as $item) {

if (array\_key\_exists($item, $arr\_textmining)) {

$arr\_textmining[$item]++;

} else {

if (strlen($item) > 2)

$arr\_textmining[$item] = 1;

}

}

$all\_komisi = $this->komisi\_m->getKomisi();

$max = 0;

foreach ($all\_komisi as $row) {

$csn = null;

$arr\_label = $this->komisi\_m->getLabel($row['id\_komisi']);

$str = lblString($arr\_label, $arr\_textmining);

$array = preg\_split('/[^[:alnum:]]+/', strtolower($str));

foreach ($array as $item) {

if (strlen($item) > 2) {

@$csn[$item]++;

}

}

// var\_dump($csn);

if ($csn) {

$hasil = cosineSimilarity($arr\_textmining, $csn);

@$cosine[$row['id\_komisi']] = $hasil;

$hasil > $max ? $max = $hasil : '';

} else {

@$cosine[$row['id\_komisi']] = 0;

}

}

$minGap = $max \* 0.75;

$dataku = [];

if ($minGap > 0) {

foreach ($cosine as $key => $value) {

if ($value >= $minGap) {

$this->db->select("web\_komisi\_user.\*");

$this->db->from("web\_komisi\_user");

$this->db->join("web\_kecamatan", "web\_kecamatan.dapil\_id=web\_komisi\_user.dapil\_id");

$this->db->where([

"web\_kecamatan.id\_kec" => $this->post('kec\_id'),

"web\_komisi\_user.komisi\_id" => $key

]);

$eks = $this->db->get()->result\_array();

$penanggun = null;

if ($eks) {

$min = 0;

foreach ($eks as $row) {

$row['jumlah\_tugas'] >= $min ? $penanggun = $row['user\_id'] : '';

}

}

if (!$penanggun) {

$dt = $this->db->get\_where("web\_komisi\_user", [

"komisi\_id" => $key,

"jabatan" => "Ketua"

])->row\_array();

$penanggun = $dt['user\_id'];

}

$tbl = initTable("web\_aspirasi", "asp");

$data = [

$tbl['key'] => $tbl['field'][$tbl['key']],

"message" => $this->post('message'),

"date\_created" => time(),

"user\_id" => $this->post('user\_id'),

"komisi\_id" => $key,

"status" => $this->post('status') ? $this->post('status') : 4,

"penanggun" => $penanggun ? $penanggun : "user\_001",

"kec\_id" => $this->post('kec\_id')

];

$this->db->insert("web\_aspirasi", $data);

$dataku[] = $this->getAsp($tbl['field'][$tbl['key']]);

}

}

} else {

$tbl = initTable("web\_aspirasi", "asp");

$data = [

$tbl['key'] => $tbl['field'][$tbl['key']],

"message" => $this->post('message'),

"date\_created" => time(),

"user\_id" => $this->post('user\_id'),

"komisi\_id" => "kms\_000",

"penanggun" => "user\_001",

"kec\_id" => $this->post('kec\_id')

];

$this->db->insert("web\_aspirasi", $data);

$dataku[] = $this->getAsp($tbl['field'][$tbl['key']]);

}

$respon = hasilCUD("Data Aspirasi Ditambahkan");

if ($respon->status) {

$this->response([

'status' => true,

"message" => $respon->message,

"data" => $dataku

], 200);

} else

$this->response([

'status' => false,

"message" => $respon->message,

"data" => $dataku

], 404);

} else {

$this->response([

'status' => FALSE,

'message' => 'Lengkapi data dulu',

"dataErrors" => $this->form\_validation->error\_array()

], 404); // NOT\_FOUND (404) being the HTTP response code

}