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LAMPIRAN

LAMPIRAN 1

package.json

```
{  
  "name": "tensorflowjs",  
  "version": "1.0.0",  
  "dependencies": {  
    "express": "latest"  
  }  
}
```

Server.js

```
let express = require("express");  
let app = express();  
  
app.use(express.static("./static"));  
  
app.listen(8080, function() {  
  console.log("server running on http://localhost:8080");  
});
```

Target_classes.js

```
TARGET_CLASSES = {  
  0: "Jasper",  
  1: "Galena",  
  2: "Malachite",  
  3: "Azurite",  
  4: "Gold"  
};
```

Index.html

```
<!DOCTYPE html>  
<html lang="en">  
  <head>  
    <meta charset="utf-8">  
    <title>TensorFlow.js: Batu dan Mineral  
Detector</title>  
    <meta name="viewport"  
content="width=device-width, initial-scale=1">  
    <meta name="description" content="">  
  
    <link rel="stylesheet"  
href="https://stackpath.bootstrapcdn.com/bootstrap/4.  
3.1/css/bootstrap.min.css"  
    integrity="sha384-  
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQU0hcWr7x9J  
voRxT2MZw1T" crossorigin="anonymous">  
    <style>
```

```

body {
    min-height: 75rem;
    padding-top: 4.5rem;
}

.bd-placeholder-img {
    font-size: 1.125rem;
    text-align: middle;
    -webkit-user-select: none;
    -moz-user-select: none;
    -ms-user-select: none;
    user-select: none;
}

@media (min-width: 768px) {
    .bd-placeholder-img-lg {
        font-size: 3.5rem;
    }
}
</style>
</head>
<body>
    <nav class="navbar navbar-expand-md
navbar-dark fixed-top bg-dark">
        <a class="navbar-brand"
href="/index.html">Batuan Detector</a>

```

```

<div class="col-6">
    <button id="predict-
button" class="btn btn-primary float-
right">Predict</button>
    </div>
</div>
<hr>
<div class="row">
    <div class="col-6">
        <h2 class="ml-
3">Image</h2>
        <img id="selected-image"
class="ml-3" width="250" alt="">
    </div>
    <div class="col-6">
        <h2 class="ml-
3">Predictions</h2>
        <ol id="prediction-
list"></ol>
    </div>
</div>
</main>
<script src="https://code.jquery.com/jquery-
3.3.1.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js
/1.14.7/umd/popper.min.js" integrity="sha384-
U02eT0CpHqdSJK6hJty5KVphtPhzWj9W01c1HTMGa3JDZwrnQq4sF
86dIHNDz0W1" crossorigin="anonymous"></script>

```

```

navbarCollapse" aria-expanded="false" aria-
label="Toggle navigation">
    <span class="navbar-toggler-
icon"></span>
    </button>
    <div class="collapse navbar-
collapse" id="navbarCollapse">
        <ul class="navbar-nav mr-auto">
            <li class="nav-item">
                <a class="nav-link"
href="/index.html">Home <span class="sr-
only">(current)</span></a>
            </li>
        </div>
    </nav>
    <main role="main" class="container mt-5">
        <div class="row">
            <div class="col-12">
                <div class="progress
progress-bar progress-bar-striped progress-bar-
animated mb-2">Loading Model</div>
            </div>
        </div>
        <div class="row">
            <div class="col-6">
                <input id="image-selector"
class="form-control border-0" type="file">
            </div>

```

Predict.js

```
$("#image-selector").change(function () {  
    let reader = new FileReader();  
    reader.onload = function () {  
        let dataURL = reader.result;  
        $("#selected-image").attr("src", dataURL);  
        $("#prediction-list").empty();  
    }  
  
    let file = $("#image-selector").prop('files')[0];  
    reader.readAsDataURL(file);  
});
```



```
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js
/bootstrap.min.js" integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/nJGzIxFDsf4x0xIM+
B07jRM" crossorigin="anonymous"></script>

<script
src="https://cdn.jsdelivr.net/npm/@tensorflow/tfjs@1.3.2/d
ist/tf.min.js"></script>

        <script src="target_classes.js"></script>
        <script src="predict.js"></script >
</body>
</html>
```

```

let model;
$( document ).ready(async function () {
    $('#progress-bar').show();
    console.log( "Loading model..." );
    // model = await
    tf.loadLayersModel('convertedmodel/model.json');
    model = await
    tf.loadLayersModel('model/model.json');
    console.log( "Model loaded." );
    $('#progress-bar').hide();
});
$("#predict-button").click(async function () {
    let image = $('#selected-image').get(0);
    console.log( "Loading image..." );
    let tensor = tf.browser.fromPixels(image, 3)
    .resizeNearestNeighbor([256, 256])
    .expandDims()
    .toFloat()
    .reverse(-1); // RGB -> BGR

    let predictions = await
    model.predict(tensor).data();
    console.log(predictions);
    let top5 = Array.from(predictions)

```

```
.map(function (p, i) { // this is Array.map
    return {
        probability: p,
        className: TARGET_CLASSES[i] // we
are selecting the value from the obj
    };
}).sort(function (a, b) {
    return b.probability - a.probability;
}).slice(0, 5);

$("#prediction-list").empty();
top5.forEach(function (p) {
    $("#prediction-
list").append(`<li>${p.className}:
${p.probability.toFixed(6)}</li>`);
});
});
```

LEMBAR PERBAIKAN SKRIPSI


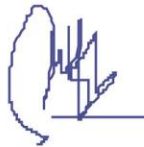


“RANCANG BANGUN SISTEM KLASIFIKASI MINERAL DAN BATUAN MENGUNAKAN TENSORFLOW.JS”

OLEH:


YAKIP
D421 14 308

Skripsi ini telah dipertahankan pada Ujian Akhir Sarjana tanggal 30 November 2020.
Telah dilakukan perbaikan penulisan dan isi skripsi berdasarkan usulan dari penguji
dan pembimbing skripsi.

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