

LAMPIRAN

Lampiran 1. Kode xml workflow model algoritma Decision Tree

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">
  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <parameter key="use_header_row" value="true"/>
    <parameter key="first_row_as_names" value="true"/>
    <list key="data_set_meta_data_information">
      <parameter key="0"
value="NO.false.integer.attribute"/>
      <parameter key="1" value="NAMA
RUMAH.false.polynomial.attribute"/>
      <parameter key="2"
value="HARGA.true.real.label"/>
      <parameter key="3"
value="LB.true.integer.attribute"/>
      <parameter key="4"
value="LT.true.integer.attribute"/>
      <parameter key="5"
value="KT.true.integer.attribute"/>
      <parameter key="6"
value="KM.true.integer.attribute"/>
      <parameter key="7"
value="GRS.true.integer.attribute"/>
    </list>
  </operator>

  <operator class="normalize" name="Normalize"
activated="false">
    <parameter key="method" value="Z-transformation"/>
  </operator>
</process>
```

```

</operator>

<operator class="blending:set_role" name="Set Role">
  <list key="set_roles">
    <parameter key="HARGA" value="label"/>
  </list>
</operator>

<operator
  class="replace_missing_values"
name="Replace Missing Values">
  <parameter key="default" value="average"/>
</operator>

<operator class="blending:split_data" name="Split
Data">
  <enumeration key="partitions">
    <parameter key="ratio" value="0.7"/>
    <parameter key="ratio" value="0.3"/>
  </enumeration>
</operator>

<operator
class="concurrency:parallel_decision_tree"
name="Decision Tree">
  <parameter key="criterion" value="least_square"/>
  <parameter key="maximal_depth" value="10"/>
  <parameter key="apply_pruning" value="true"/>
  <parameter key="minimal_gain" value="0.01"/>
  <parameter key="minimal_leaf_size" value="2"/>
</operator>

<operator class="apply_model" name="Apply Model"/>

<operator
  class="performance_regression"
name="Performance">_

```

Lampiran 2. Kode xml workflow model algoritma Neural Network

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">

  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <list key="data_set_meta_data_information">
      <parameter key="HARGA" value="true.real.label"/>
      <parameter key="LB"
value="true.integer.attribute"/>
      <parameter key="LT"
value="true.integer.attribute"/>
      <parameter key="KT"
value="true.integer.attribute"/>
      <parameter key="KM"
value="true.integer.attribute"/>
      <parameter key="GRS"
value="true.integer.attribute"/>
    </list>
  </operator>

  <operator class="replace_missing_values"
name="Replace Missing Values">
    <parameter key="default" value="average"/>
  </operator>

  <operator class="normalize" name="Normalize"
activated="false">
    <parameter key="method" value="Z-transformation"/>
  </operator>
```

```

<operator class="blending:set_role" name="Set Role">
  <parameter key="HARGA" value="label"/>
</operator>

<operator class="blending:split_data" name="Split
Data">
  <parameter key="ratio" value="0.7"/>
</operator>

<operator class="neural_net" name="Neural Net">
  <parameter key="training_cycles" value="200"/>
  <parameter key="learning_rate" value="0.01"/>
  <parameter key="momentum" value="0.9"/>
</operator>

<operator class="apply_model" name="Apply Model"/>

<operator class="performance_regression"
name="Performance">
  <parameter key="root_mean_squared_error"
value="true"/>
  <parameter key="absolute_error" value="true"/>
</operator>

<operator class="log" name="Log">
  <parameter key="Time_Execution_Training"
value="operator.Neural Net.value.execution-time"/>
  <parameter key="Time_Execution_Testing"
value="operator.Apply Model.value.execution-time"/>
</operator>

</process>

```

Lampiran 3. Kode xml workflow model algoritma K-Nearest Neighbor

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">

  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <list key="data_set_meta_data_information">
      <parameter key="HARGA" value="true.real.label"/>
      <parameter key="LB"
value="true.integer.attribute"/>
      <parameter key="LT"
value="true.integer.attribute"/>
      <parameter key="KT"
value="true.integer.attribute"/>
      <parameter key="KM"
value="true.integer.attribute"/>
      <parameter key="GRS"
value="true.integer.attribute"/>
    </list>
  </operator>

  <operator class="replace_missing_values"
name="Replace Missing Values">
    <parameter key="default" value="average"/>
  </operator>

  <operator class="normalize" name="Normalize"
activated="false">
    <parameter key="method" value="Z-transformation"/>
  </operator>
```

```

    <operator class="blending:set_role" name="Set Role">
      <parameter key="HARGA" value="label"/>
    </operator>

    <operator class="blending:split_data" name="Split
Data">
      <parameter key="ratio" value="0.7"/>
    </operator>

    <operator class="k_nn" name="k-NN">
      <parameter key="k" value="5"/>
      <parameter key="weighted_vote" value="true"/>
    </operator>

    <operator class="apply_model" name="Apply Model"/>

    <operator class="performance_regression"
name="Performance">
      <parameter key="root_mean_squared_error"
value="true"/>
      <parameter key="absolute_error" value="true"/>
    </operator>

    <operator class="log" name="Log">
      <parameter key="Time_Execution_Training"
value="operator.k-NN.value.execution-time"/>
      <parameter key="Time_Execution_Testing"
value="operator.Apply Model.value.execution-time"/>
    </operator>

</process>

```

Lampiran 4. Kode xml workflow model algoritma Gradient Boosted Trees

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">

  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <list key="data_set_meta_data_information">
      <parameter key="HARGA" value="true.real.label"/>
      <parameter key="LB"
value="true.integer.attribute"/>
      <parameter key="LT"
value="true.integer.attribute"/>
      <parameter key="KT"
value="true.integer.attribute"/>
      <parameter key="KM"
value="true.integer.attribute"/>
      <parameter key="GRS"
value="true.integer.attribute"/>
    </list>
  </operator>

  <operator class="replace_missing_values"
name="Replace Missing Values">
    <parameter key="default" value="average"/>
  </operator>

  <operator class="normalize" name="Normalize">
    <parameter key="method" value="Z-transformation"/>
  </operator>

  <operator class="blending:set_role" name="Set Role">
    <list key="set_roles">
```

```

        <parameter key="HARGA" value="label"/>
    </list>
</operator>

<operator class="blending:split_data" name="Split
Data">
    <enumeration key="partitions">
        <parameter key="ratio" value="0.7"/>
        <parameter key="ratio" value="0.3"/>
    </enumeration>
</operator>

<operator class="h2o:gradient_boosted_trees"
name="Gradient Boosted Trees">
    <parameter key="number_of_trees" value="50"/>
    <parameter key="maximal_depth" value="5"/>
    <parameter key="learning_rate" value="0.01"/>
</operator>

<operator class="apply_model" name="Apply Model"/>

<operator class="performance_regression"
name="Performance">
    <parameter key="root_mean_squared_error"
value="true"/>
    <parameter key="absolute_error" value="true"/>
</operator>

<operator class="log" name="Log">
    <list key="log">
        <parameter key="Time_Execution_Training"
value="operator.Gradient Boosted
Trees.value.execution-time"/>
        <parameter key="Time_Execution_Testing"
value="operator.Apply Model.value.execution-time"/>
    </list>
</operator>
</process>

```

Lampiran 5. Kode xml workflow model algoritma Support Vector Regression

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">
  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <parameter key="use_header_row" value="true"/>
    <parameter key="first_row_as_names" value="true"/>
    <list key="data_set_meta_data_information">
      <parameter key="0"
value="NO.false.integer.attribute"/>
      <parameter key="1" value="NAMA
RUMAH.false.polynomial.attribute"/>
      <parameter key="2"
value="HARGA.true.real.label"/>
      <parameter key="3"
value="LB.true.integer.attribute"/>
      <parameter key="4"
value="LT.true.integer.attribute"/>
      <parameter key="5"
value="KT.true.integer.attribute"/>
      <parameter key="6"
value="KM.true.integer.attribute"/>
      <parameter key="7"
value="GRS.true.integer.attribute"/>
    </list>
  </operator>
  <operator class="normalize" name="Normalize"
activated="false">
    <parameter key="method" value="Z-transformation"/>
  </operator>
  <operator class="blending:set_role" name="Set Role">
    <list key="set_roles">
```

```

        <parameter key="HARGA" value="label"/>
    </list> </operator>

    <operator          class="replace_missing_values"
name="Replace Missing Values">
        <parameter key="default" value="average"/>
    </operator>

    <operator  class="blending:split_data"  name="Split
Data">
        <enumeration key="partitions">
            <parameter key="ratio" value="0.7"/>
            <parameter key="ratio" value="0.3"/>
        </enumeration>
    </operator>

    <operator          class="support_vector_machine_linear"
name="SVM (Linear)">
        <parameter key="C" value="10.0"/>
        <parameter key="max_iterations" value="100000"/>
        <parameter key="epsilon" value="0.5"/>
    </operator>

    <operator class="apply_model" name="Apply Model"/>
    <operator          class="performance_regression"
name="Performance">
        <parameter          key="root_mean_squared_error"
value="true"/>
        <parameter key="absolute_error" value="true"/>
    </operator>

    <operator class="log" name="Log">
        <list key="log">
            <parameter          key="Time_Execution_Training"
value="operator.SVM (Linear).value.execution-time"/>
            <parameter          key="Time_Execution_Testing"
value="operator.Apply Model.value.execution-time"/>
        </list>
    </operator>
</process>

```

Lampiran 6. Kode xml workflow model algoritma Random Forest

```
<?xml version="1.0" encoding="UTF-8"?>
<process version="11.1.000">
  <operator class="read_excel" name="Read Excel">
    <parameter key="excel_file"
value="C:\Users\Administrator\Documents\SKRIPSI SAHAL
ABDILLAH\DATASHEET\DATA RUMAH skripsi.xlsx"/>
    <parameter key="sheet_number" value="1"/>
    <parameter key="use_header_row" value="true"/>
    <parameter key="first_row_as_names" value="true"/>
    <list key="data_set_meta_data_information">
      <parameter key="0"
value="NO.false.integer.attribute"/>
      <parameter key="1" value="NAMA
RUMAH.false.polynomial.attribute"/>
      <parameter key="2"
value="HARGA.true.real.label"/><parameter key="3"
value="LB.true.integer.attribute"/><parameter key="4"
value="LT.true.integer.attribute"/><parameter key="5"
value="KT.true.integer.attribute"/><parameter key="6"
value="KM.true.integer.attribute"/><parameter key="7"
value="GRS.true.integer.attribute"/>
    </list> </operator>
    <operator class="normalize" name="Normalize"
activated="false">
      <parameter key="method" value="Z-transformation"/>
    </operator>
    <operator class="blending:set_role" name="Set Role">
      <list key="set_roles">
        <parameter key="HARGA" value="label"/>
      </list> </operator>
    <operator class="replace_missing_values"
name="Replace Missing Values">
      <parameter key="default" value="average"/>
    </operator>
```

```

    <operator class="blending:split_data" name="Split
Data">
      <enumeration key="partitions">
        <parameter key="ratio" value="0.7"/>
        <parameter key="ratio" value="0.3"/>
      </enumeration>
    </operator>
    <operator
class="concurrency:parallel_random_forest"
name="Random Forest">
      <parameter key="number_of_trees" value="100"/>
      <parameter key="maximal_depth" value="10"/>
      <parameter key="criterion" value="least_square"/>
      <parameter key="minimal_leaf_size" value="2"/>
      <parameter key="minimal_gain" value="0.01"/>
    </operator>
    <operator class="apply_model" name="Apply Model"/>
    <operator class="performance_regression"
name="Performance">
      <parameter key="root_mean_squared_error"
value="true"/>
      <parameter key="absolute_error" value="true"/>
    </operator>
    <operator class="log" name="Log">
      <list key="log">
        <parameter key="Time_Execution_Training"
value="operator.Random Forest.value.execution-time"/>
        <parameter key="Time_Execution_Testing"
value="operator.Apply Model.value.execution-time"/>
      </list>
    </operator>
  </process>

```