ARML vs. KARML

Competing ideas?

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**ARML**

- KML very rich and extensive Tag set
- Most tags not needed/suited for AR
- Based on subset of KML

More: http://openarml.org
Simple ARML

<?xml version="1.0" encoding="UTF-8"?>
<kml xmlns="http://www.opengis.net/kml/2.2">
  <Document>
    <ar:provider id="mountain-tours.com">
      <ar:name>Mountain Tours I Love</ar:name>
      <ar:description>
        My preferred mountain tours in the alps. Summer and Winter.
      </ar:description>
    </ar:provider>
    <Placemark id="123">
      <ar:provider>mountain-tours.com</ar:provider>
      <name>Gaisberg</name>
      <description>
        Gaisberg is a mountain to the east of Salzburg, Austria
      </description>
      <Point>
        <coordinates>47.81,13.11,1158</coordinates>
      </Point>
      <wikitude:info>
        <wikitude:phone>+4312345678</wikitude:phone>
      </wikitude:info>
    </Placemark>
  </Document>
</kml>
Structure

- Provider
  
  `<ar:provider id="mountain-tours.com">
  ...
  </ar:provider>`

- Pois
  
  `<Placemark id="123">
  <ar:provider>mountain-tours.com</ar:provider>
  ...
  </Placemark>`
Namespaces

☐ Available in all AR Browsers
  ☐ ar
  ☐ provider
  ☐ name
  ☐ description

☐ Browser specific features, eg.:
  ☐ wikititude
    ☐ providerUrl, tags, logo, icon
    ☐ info (thumbnail, phone, url, email, attachment)
KARML

- Author and display AR experiences
- Full KML + more control over visualization

More: https://research.cc.gatech.edu/polaris/content/karml-reference
KARML Extensions

Source: https://research.cc.gatech.edu/polaris/content/karml-reference
Billboard - Example

<Placemark>
  <name>MyPlacemark</name>
  <description>
  My example placemark relative to user
  </description>
  <Balloon>
    <locationMode units="meters" targetHRef="#user">relative
    </locationMode>
    <location>
      <latitude>2.0</latitude>
      <longitude>0.0</longitude>
      <altitude>0.0</altitude>
    </location>
    <orientationMode>billboard</orientationMode>
  </Balloon>
</Placemark>
ARML vs KARML

- Approach
  - Data (ARML)
  - Visualization (KARML)

- KML
  - Subset (ARML)
  - Full (KARML)
Why Content Providers?

- Universal, more providers in one file
- Connect content to its provider
- Content easily identifiable
- Display provider brands in a consistent way
- Premium content
- Information on the provider → trust and control
Conclusion

☑ Both approaches relevant
☑ KML integral part in both
☑ Combine ideas
☑ Decision:
  - KML subset or extend full KML
  - Tags in ar namespace