A biometric modality is nothing but a category of a biometric system depending upon the type of human trait it takes as input.

The biometrics is largely statistical. The more the data available from sample, the more the system is likely to be unique and reliable. It can work on various modalities pertaining to measurements of individual’s body and features, and behavioral patterns. The modalities are classified based on the person’s biological traits.

Types of Biometric Modalities

There are various traits present in humans, which can be used as biometrics modalities. The biometric modalities fall under three types –

- Physiological
- Behavioral
- Combination of physiological and behavioral modality

The following table collects the points that differentiate these three modalities –

<table>
<thead>
<tr>
<th>Physiological Modality</th>
<th>Behavioral Modality</th>
<th>Combination of Both Modalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>This modality pertains to the shape and size of the body.</td>
<td>This modality is related to change in human behavior over time.</td>
<td>This modality includes both traits, where the traits are depending upon physical as well as behavioral changes.</td>
</tr>
</tbody>
</table>

For example –

- Fingerprint Recognition
- Hand Geometry Recognition system
- Facial Recognition System
- Iris Recognition System
- Hand Geometry Recognition System
- Retinal Scanning System
- DNA Recognition System

For example –

- Gait *thewayonewalks*
- Rhythm of typing keys
- Signature

For example –

- Voice Recognition
  It depends on health, size, and shape of vocal cord, nasal cavities, mouth cavity, shape of lips, etc., and the emotional status, age, illness *behavior* of a person.

In the subsequent chapters, we will discuss each of these modalities in greater detail.