Dalhousie University  
School of Information Management

**ASSIGNMENT 1: Ontology**

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**Ontology on Backstreet Boys**

This paper overview the Backstreet Boys Music Albums Ontology. This ontology is restricted to domain considering the concepts only related to backstreet boys. A formal framework for dealing with album-related information which has set the boundaries to band members, songs, albums, awards, award year, and song writers. The ontology includes the manual annotations in the annotation properties. The object property displays the characteristics for the selected object. The object properties taken for this ontology are:

* hasGivenTo
* isGiven
* hasWritten
* isWrittenBy
* hasCollectionOf
* isCollectionOf
* hasReceived
* isReceivedInThe

hasGivenTo, hasWritten, hasCollectionOf, hasReceived are functional because here the individual is related to the individual. The object properties isGiven, isWrittenBy, isCollectionOf, isReceivedInThe are defined as the inverse properties to the functional properties because for a given individual, there is one individual related. For example, hasGivenTo is functional, isGiven is inverse functional.

The mentioned object properties cannot be transitive, symmetric, asymmetric, reflexive, and irreflexive as they have only two individuals, does not relate to same property or different properties.

**Visualization of Backstreet boys Ontology**

**Backstreet boys**

is-a

**Band Members**

is-a

is-a

**Song Writers**

is-a is-a

**Albums**

**Songs**

hasWritten

**Award year**

isWrittenBy

is-a

is-a

hasCollectionOF isReceivedInThe. hasReceived

hasGivenTo

**Awards**

isCollectionOf

isGiven

Figure 1: Visualization of Backstreet boys Ontology

A close up of a map

Description automatically generated

Figure 2: Sample Screenshot of OntoGraph