

# **HiveMind System Design**

**Group Name: Working Bees**

**Group Members:** Arjun, Calvin, Morgan, Katty,  
Jeremy, and Joshua

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# 1 CRC Cards

Hive	
<ul style="list-style-type: none"><li>• Represents a custom room for group making that is accessed using a code</li><li>• Contains the unique criteria specified by the host and the current group formations</li><li>• Keeps track of the current phase of the algorithm and acts a means for the host to monitor the group making process</li></ul>	<ul style="list-style-type: none"><li>• Arjun</li><li>• Morgan</li><li>• Katty</li><li>• Joshua</li></ul>

User	
<ul style="list-style-type: none"><li>• Represents an individual person using the application</li><li>• Can choose from a collection of Hives to join, and in each, can be either a host or an attendee</li><li>• Used in authentication</li></ul>	<ul style="list-style-type: none"><li>• Arjun</li><li>• Jeremy</li><li>• Calvin</li></ul>

Host	
<ul style="list-style-type: none"><li>• Sets the criteria each partipant should enter for match making</li><li>• Has a high level view of the matchmaking process via the hive</li></ul>	<ul style="list-style-type: none"><li>• Arjun</li><li>• Calvin</li></ul>

Attendee	
<ul style="list-style-type: none"><li>• Represents a user in the hive looking to be grouped</li><li>• Can join or invite other attendees to be part of their matching group prior to the match making process</li></ul>	<ul style="list-style-type: none"><li>• Arjun</li><li>• Jeremy</li></ul>

MatchingGroup	
<ul style="list-style-type: none"> <li>• Represents an individual or initial group of people to be grouped by the algorithm</li> <li>• Contains a profile (name, biography, and profile picture) and a set of responses to the matching questions made by the host</li> <li>• Gives responses of preference to the group making algorithm in the form of accept, reject, or indifference to each other matching group</li> </ul>	<ul style="list-style-type: none"> <li>• Arjun</li> <li>• Calvin</li> </ul>

Swarm	
<ul style="list-style-type: none"> <li>• Represents a final group made by the algorithm</li> <li>• Contains each of the members in the group and a chat for them to communicate</li> </ul>	<ul style="list-style-type: none"> <li>• Arjun</li> </ul>

## 2 Software Architecture Diagram

We are using a three-tier architecture for our product. More information about this architecture can be found below.

<https://www.ibm.com/topics/three-tier-architecture>

