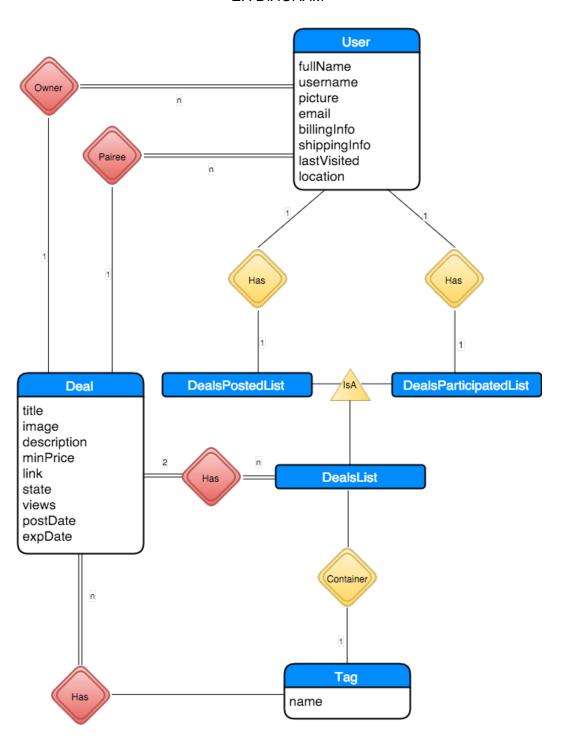
## Startup Submission 03: ER Diagrams - CS 326 Spring 2016

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## ER DIAGRAM



## SHORT ENTITY DESCRIPTIONS

**User**: A unique user with profile information stored in the database. Users are able to create and participate in deals. [Note: we have deleted some non-critical attributes of a User that we showed in our UI mockups; this difference is trivial.]

Owner: The User who posts a Deal. Each Deal can only have a single Owner.

**Pairee**: A User who is a participant in a Deal, but who is *not* the Owner. Each Deal may only have one Pairee and one Owner, because a Deal can only be shared by two Users.

**DealsList**: A collection of Deals. DealsParticipatedList and DealsPostedList each have an IsA relationship to DealsList.

**DealsParticipatedList**: A list of Deals that a User has participated in. Each individual User has one such list.

**DealsPostedList**: A list of Deals that a User has posted (meaning that the User is the Owner of these Deals). Each individual User has one such list.

**Deal**: A unique deal in the database. Each Deal maintains references to the Tag(s) associated with it. Each Deal, however, appears in one DealsParticipatedList (belonging to the Pairee) and in one DealsPostedList (belonging to the Owner).

Tag: A keyword that is associated with a Deal. Owners enter keywords when they post deals, and Pairees will be shown results tagged with these keywords when they search for deals they are interested in. Each Tag maintains one DealsList containing all the Deals associated with that keyword; this DealsList is embedded in the Tag and as such, does not itself maintain information about the Tag, which is why we have chosen not to label the line between "DealsList" and "Container" on our ER diagram. Because every Tag has one DealsList, it does not maintain information about individual Deals, which is why there is no label in our diagram between "Has" and "Tag".

## DESCRIPTION OF HOW EACH WIDGET USES THE ENTITIES IN THE APPLICATION

**Intro Screen**: The Intro Screen does not require any interaction with the database until login authentication is required for the project.

**Homepage**: The Homepage contains 6 Deals, displayed in a grid, at a time, and will probably rotate through deals if the User idles on the page. These Deals will be recent and popular postings that have not expired, and attributes of the Deal entity will be used to determine the state ("active," "complete," "expired") and popularity (based on Views) of these Deals and thus, whether they might be displayed.

**Navbar widget:** The navbar contains a search bar which allows a User to type a name of a Tag. This Tag is used to specify a DealsList that contains only Deals with the entered Tag. A user can type in multiple Tags to find Deals that contain all entered tag names.

**User Profile/Edit Profile/Guest View**: The profile pages feature important attributes in the User entity and display its relationships. The User Profile and Guest View pages display certain information about a User, while the Edit Profile page allows for modification of this data.

Active Deals/Deal History/Shipping & Payment Widget: Each user will be able to view two lists on their profile page. One list is DealsPostedList and the other is DealsParticipatedList. Both have an "isA" relationship with DealList which is composed of ("Has") many Deals. The Shipping and Payment information is also posted in this widget, but these are attributes of a User rather than being their own entities.

**Deal (Search) Results**: The Search Results page features a collaged UI of the Deals in the database filtered by the Tags entered by the User in the search bar at the top of the page. These Deals pictures from the database have been uploaded to the Pair'd site by Owners. **Selected Deal/Item**: This page displays all the attributes of a Deal to a Pairee once the Deal has been posted by its Owner. Besides these attributes, this widget displays all the relationships a Deal has — with Tags, an Owner, and the possibility of the User viewing the Deal to become its Pairee.

**Post Item**: Once this form/page is filled out with the necessary information to post a new Deal to Pair'd (this information is the attributes of a Deal plus its relationships to Tags and DealsLists), the User becomes the Owner of this Deal and awaits another User to be the Pairee.