CRC Model

Optimistic Newts

Enterprise Business Rules	**User**	
Responsibilities		Collaborators
- id - username - password - location - interests - rating - numRatings - loginStatus - friends - conversations - getId() - getUsername() - setUsername() - getPassword() - setPassword()	- getLocation() - getInterests() - setLocation() - addInterest() - removeInterest() - getRating() - addRating() - login() - logout() - addFriend() - removeFriend() - getFriends() - addConversation() - removeConversation() - getConversations()	Conversation

Enterprise Business Rules

Conversation

Responsibilities		Collaborators
- id - title - topic - location - locationRadius - minRating - maxSize - closingTime - isOpen #public - messages - users - getId() - getTitle() - setTitle() - getTopic() - setTopic()	- getLocation() - setLocation() - getLocationRadius() - setLocationRadius() - getMinRating() - setMinRating() - getMaxSize() - setMaxSize() - getClosingTime() - setClosingTime() - getMessages() - addMessage() - removeMessage() - getUsers() - addUser() - removeUser()	- User - Message

Enterprise Business Rules	**Message**	
Responsibilities		Collaborators
• body • author • writtenAt # set to time of constructor call • lastUpdatedAt • getBody() • setBody() • getAuthor() • getWrittenAt() • getLastUpdatedAt() • setLastUpdatedAt() #set to time of method call. Make this private and call inside of setBody()		• User

Enterprise Business Rules	**ConversationQueue**	**implements Queue\<Conversation\>**

Responsibilities		Collaborators
For Queue interface ● add() ● element() ● offer() ● peek() ● poll() ● remove() ● + some Collection interface methods	ConversationQueue specific: ● conversations (heap) ● location ● locationRadius ● Interests ● getLocation() ● getLocationRadius() ● getInterests() ● toKeyedConversation()	● Conversation ● KeyedConversation

Application Business Rules	**UserManager**	**implements InputBoundary**
Responsibilities		**Collaborators**
● user ● UserInteractor(User) ● Create User ● Login User ● Delete User	● request(RequestModel)	● User ● RequestModel (data structure)

Application Business Rules	**ConversationManager**	**implements InputBoundary**
Responsibilities		Collaborators
• conversation • ConversationInteractor(Conversation) • Create Conversation • Change Conversation Status • Add Messages to conversation	• request()	• Conversation • RequestModel

Application Business Rules	MessageManager	implements InputBoundary
Responsibilities		Collaborators
● message ● MessageInteractor(Message) ● Creates messages ● Updates messages	● request()	● Message ● RequestModel

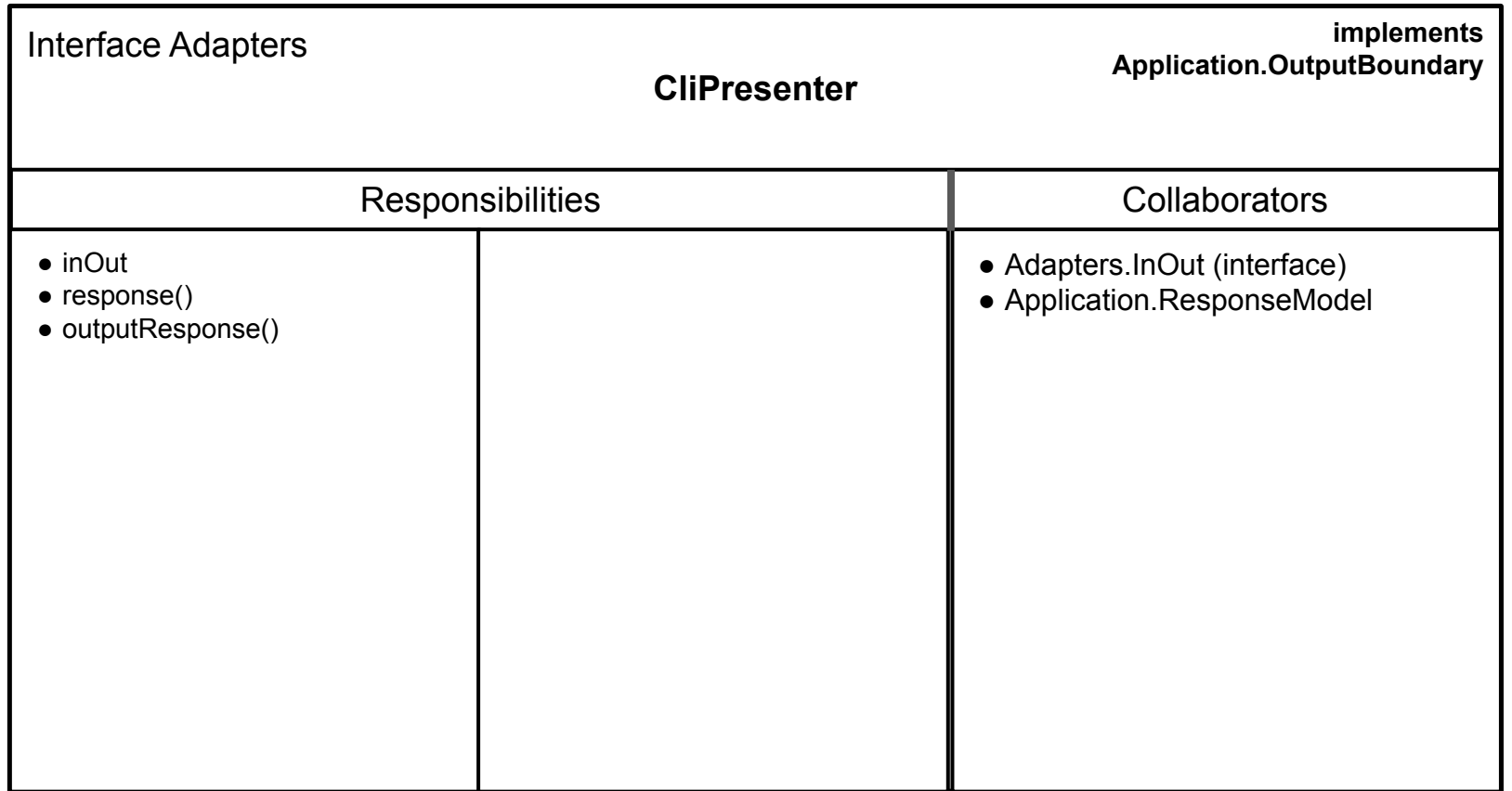| Application Business Rules	ConversationQueueManager		implements InputBoundary
Responsibilities			**Collaborators**
• conversationQueue • ConversationQueueInteractor(ConversationQueue) • Creates a new ConversationQueue • Dequeues Conversations from the ConversationQueue	• request()		• ConversationQueue • RequestModel

Interface Adapters

CliController

Responsibilities		Collaborators
● inOut ● Validate input ● Call appropriate interactor ● Control Cli menu flow		● Application.RequestModel ● Application.InputBoundary ● Adapters.InOut (interface) ● Many Interactors

Interface Adapters	**CliPresenter**	**implements** **Application.OutputBoundary**
Responsibilities		Collaborators
● inOut ● response() ● outputResponse()		● Adapters.InOut (interface) ● Application.ResponseModel

Frameworks & Drivers **CliDriver**	**implements Adapters.InOut**

Responsibilities		Collaborators
● reader ● getInput() ● sendOutput()		