

# Conversation API - Simple Example Case

(Bukkit 1.1-R6 +)

# Contents

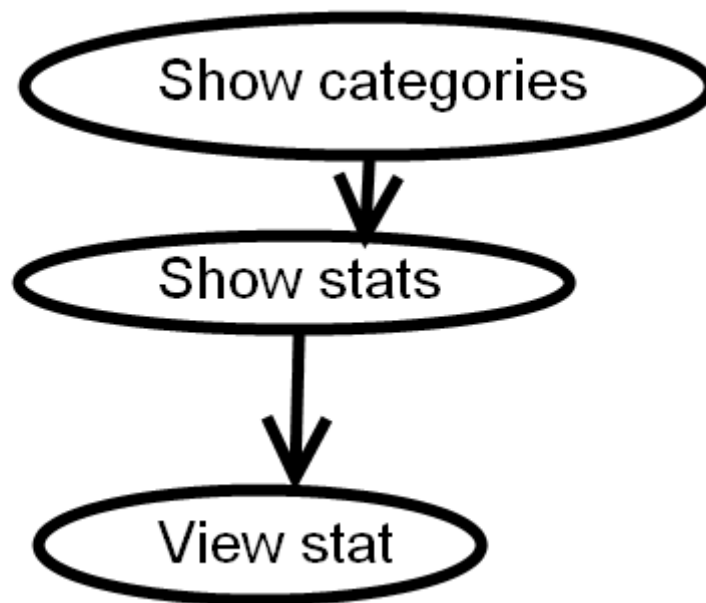
- Code from BeardStat's interactive mode, which is built on the Conversation API (from the previous slides).
- A more detailed breakdown of each part of a Prompt's methods.
- Screenshots of the output.

# Example - BeardStats

- To look at stats in game, you use the /stats command.
- To find a particular stat takes 3 commands
- `/stats -c` :: View all categories
- `/stats -c blockdestroy` :: view all stats in the blockdestroy category
- `/stats blockdestroy.grass` :: view the stat.
- Must be a better way to do so.

# Example – BeardStats Cont.d

- Step in conversations
- Simple 3 prompt graph.



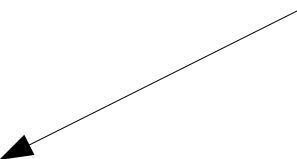
# List Category prompt

```
listCategory = new ValidatingPrompt() {
```

```
    public String getPromptText(ConversationContext context) {
        CommandSender sender = (CommandSender)context.getForWhom();
        HashSet<String> cats = new HashSet<String>();
        for( PlayerStat ps :playerStatManager.getPlayerBlob(((Player)sender).getName()).getStats()){
            if(!cats.contains(ps.getCat())){
                cats.add(ps.getCat());
            }
        }
        String msg = "";

        Iterator<String> it = cats.iterator();
        while(it.hasNext()){
            for(int i=0;i<10;i++){
                if(it.hasNext()){
                    if(i>0){msg+=", ";}
                    msg+=it.next();
                }
            }
            context.getForWhom().sendRawMessage(ChatColor.AQUA + msg);
            msg="";
        }
        return "Select a category";
    }
}
```

DO NOT CAST TO PLAYER  
AND sendMessage()  
IT WILL BE BLOCKED




```
@Override
protected boolean isValidInput(ConversationContext context, String input) {
    Player sender = (Player)context.getForWhom();

    return playerStatManager.getPlayerBlob(sender.getName()).hasCat(input);
}

@Override
protected Prompt acceptValidatedInput(ConversationContext context,
    String input) {
    context.setSessionData("cat", input);
    return ListStat;
}
};
```

Set session data for this  
User for use in the next  
Prompt.



# Breakdown - getPromptText()

1. Loop through and generate the list of categories to display.
2. Format and present to the user
3. Return the prompt to show them.

# Breakdown - getPromptText()



# Breakdown - isValid()

1. Checks if value is a valid category.
2. Returns true/false.
3. If false, getPromptText() is called again
4. If True, acceptValidInput()



# Breakdown - acceptValidInput()

1. Stores value in conversation session.
2. Provides the next prompt to move to.

# Breakdown – isValidInput() acceptValidInput()

Input from user, a  
valid category

AcceptValidInput() stores  
The value, moves to next  
Prompt.



List stat is the same as list category,  
Just a different data set.

# ViewStat

```
return (String) context.getSessionData("cat") +  
        "." +  
        (String) context.getSessionData("stat") +  
        " : "+  
        playerStatManager.getPlayerBlob(sender.getName()).getStat(  
            (String) context.getSessionData("cat"),  
            (String) context.getSessionData("stat")  
        ).getValue();
```

# Breakdown – view stat

- 1) Declared as a MessagePrompt, since it only does output, not input.
- 2) Read back the session data to find the stat to display
- 3) Display it through getPromptText()
- 4) Points to a BooleanPrompt.

# Breakdown – view stat



# BooleanPrompt

- Final prompt in the tree.
- Asks user if they wish to search another stat.
- On true, provide listCategory stat
- On false, end conversation (return null)
- BooleanPrompt provides the code for isValidInput() (has a built in list of valid data, yes,no true, false etc)



# BooleanPrompt





# code

- The code for the prompts can be found here

<https://github.com/tehbeard/BeardStat/tree/version/0.4-grapefruit/src/main/java/me/tehbeard/BeardStat/commands/interactive>

It has changed since writing these slides, but the core of it is still there (just separated out into separate classes rather than a big blob of code).

# Next time

- A step by step tutorial.
  - Time to give villagers a voice.
  - Demonstrate the flexibility of the Conversation API.
- Comments, questions, your own code samples.  
Use the thread and help provide a rich source of knowledge for fellow Bukkit plugin devs