

Use Case Name: Comedy Recommendation
Brief Description: After viewers choose their comedy preferences, based on these information, Netflix starts to provide recommended movies and TV shows for viewers, and it will automatically update its recommendations according to their later-on viewing.
Actors:
• Netflix viewers
• Netflix Apps or applications
• Netflix log-in & billing system
• Netflix recommendation algorithm service
• Netflix rating database
• Netflix content system
• Netflix account profile system
Basic Flow of Events:
1. A viewer fills the valid user name and password trying to log in Netflix App.
2. Netflix App sends the log-in request to Netflix log-in & billing system.
3. Netflix log-in & billing system responses a successful ack to Netflix App.
4. The viewer is able to log in Netflix App.
5. Netflix App requires the viewer to select three comedy movies or TV shows that he likes.
6. The viewer chooses three comedy movies or TV shows on Netflix App.
7. Netflix App sends these preferences to Netflix recommendation algorithm service.
8. Netflix recommendation algorithm service stores these preferences to Netflix account profile system.
9. Netflix recommendation algorithm service pulls relevant content data from Netflix rating database.
10. Netflix recommendation algorithm service performs calculations for the recommendation list for the viewer.
11. Netflix recommendation algorithm service generates the recommended list to Netflix App.
12. Netflix recommendation algorithm service stores the recommended list in Netflix account profile system.
13. Netflix Apps displays the recommended list of movies and TV shows to the viewer.
14. The viewer selects a movie or TV show on Netflix App to play.
15. Netflix App sends a play request to Netflix rendering service.
16. Netflix rendering service pulls the content from Netflix content system.
17. Netflix rendering service sends the content to Netflix App.
18. The viewer is able to watch the movie or TV show on Netflix App.

19. Netflix App also sends this selection to Netflix recommendation algorithm service.
20. Netflix recommendation algorithm service stores the selection to Netflix account profile system.
21. Netflix recommendation algorithm service pulls relevant content data from Netflix rating database and Netflix account profile system.
22. Netflix recommendation algorithm service performs calculations for the recommendation list.
23. Netflix recommendation algorithm service updates the recommended list in Netflix account profile system.
24. When the viewer logs in again Netflix App, the updated recommendation list obtained from Netflix account profile system will be shown on the screen.
Alternate Flows:
<ul style="list-style-type: none"> 3a. If Netflix log-in & billing system is out of order and cannot response an ack to Netflix App immediately, Netflix App will show an error message to the viewer and ask him try again later.
<ul style="list-style-type: none"> 6a. If viewer does not choose any listed movies or TV shows, Netflix recommendation algorithm service still generates its default recommendations based on current popularity.
<ul style="list-style-type: none"> 6b. If viewer chooses less than three or more than three listed movies or TV shows, Netflix recommendation algorithm service also can generate its recommendations based on the viewer's selection.
<ul style="list-style-type: none"> 11a. If Netflix recommendation algorithm service cannot generate the recommendations immediately, it will send an error code or message to Netflix App. The viewer can use this information as keyword to search on Netflix "Help Center home page", and then the viewer will be given the solution to the issue.
<ul style="list-style-type: none"> 12a. If Netflix recommendation algorithm service cannot store the recommended list in Netflix account profile system, Netflix account profile system still has the default recommended list.
<ul style="list-style-type: none"> 18a. If the viewer wants to stop watching the current comedy, the viewer can return to the recommended list and select another comedy.
<ul style="list-style-type: none"> 18b. If the viewer is unable to watch the movie or TV show on Netflix App due to the malfunction of Netflix rendering service, Netflix rendering service will send an error code or message to Netflix App.
Preconditions:
<ul style="list-style-type: none"> Stable internet connectivity is required. A viewer's Netflix account is valid.
Success Guarantee:

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| <ul style="list-style-type: none">• The viewer can obtain a personalized recommendation list of comedies.• The recommended list will be automatically updated for future viewing. |
| Minimal Guarantee: |
| <ul style="list-style-type: none">• In the worst case, the viewer still can obtain a general recommendation list without customization or update. |