

TV Fanatic

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Opportunity

This app provides an environment in which viewers can share their opinions of the latest episodes of their favorite television shows and see what others are saying.

Vision

Can't believe that happened in last night's episode? Was the season finale a huge letdown or a total shocker? With TV Fanatic, let the world know. And see what everyone else is thinking. TV Fanatic lets users rate and review television series on a per-episode basis.

Major Features

- Rate and review any TV episode of any series.
- View an episode's aggregate rating, and read reviews by other users.
- Comment on reviews.
- Add shows to your Favorites to gain instant access from your main page.
- Agree strongly with a review you see? Think the person got it all wrong? Just hit Agree or Disagree. The overall percentage of users who agree with a review is shown with the review.

Assumptions and Dependencies

The app will target Android 3.0 and above, and will be designed primarily for tablet.

Dependencies: TV show data API, server, database, JSON libraries.

Scope of Current Release

The current release will bring the app to a usable state (perhaps lacking some frills). The essence of the app – reviewing, rating, commenting, agreeing, searching for shows – will be implemented. (See Feature List)

Scope of Potential Future Releases

Future releases might add:

- “Watch on Netflix” and “Watch on Hulu” buttons in View Episode activity.
- Metacritic score displayed to contrast TV Fanatic user rating with critical opinion of the season.
- A view with graphs that indicate user-rating trends over the episodes of a season, and across all seasons of a show (i.e. has the quality of the show dropped from its first season, or has it only gotten better?).
- Anti-vandalism measures: perhaps a “Report” button to flag a review or comment for evaluation by moderators. Vulgarity filter for comments and reviews.
- Hierarchical (nested) comments in client view.
- Phone-size support.
- Simple user leveling system based on contribution (number of reviews and comments).
- A website client to bring TV Fanatic to users of those noisy, heat-emitting boxes called “computers”.

Operating Environment

On the local device, the app will store little in the way of permanent data, other than some preferences. A server provides the data related to TV episodes, and stores users' reviews, ratings, and comments in a database.

Competitive Analysis

We have found no comparable app in the marketplace. This may very well be the first app to allow users to share their opinion of a television series on a per-episode basis. Existing television reviews (primarily web-based) consider the entire show or a whole season (often after only a single episode has aired).

Feature List

By the end of the quarter, the following features should be implemented:

1. Search T.V. shows.
2. View T.V. show and its list of episodes.
3. View episode, including its aggregate rating and a summary list of user reviews.
4. View a user review, including its comments.
5. Rate an episode.
6. Write a review for an episode.
7. Add shows to Favorites list.
8. Comment on a review. Reply to a comment.
9. Mark Agree or Disagree on a review.
10. Server application provides data from a database and by querying a publically-accessible television data API (see Details: 6d).
11. Database with tables to manage user accounts, reviews, comments, ratings, and known info on TV series and episodes.
12. If all of the above are completed with time to spare, add features from future scopes.

Feature List - Details

1. User accounts

- a. Users register for a free account to enjoy the full benefits of the app.
- ~~b. Preferably, the user may register with their Google account.~~
 - i. After investigation, it appears that authentication through Google's OpenID may not be the optimal solution for this app. Instead, the user may register with any email (their main Google account, as registered on their device, is supplied in the Sign Up screen by default, but may be changed to another email by the user).
 - ii. This "Sign Up" screen appears only during the first time the user runs the app, and after successful registration, the account info is saved with the app preferences, and the client "auto-authenticates" (using this preference data) with the server upon each subsequent launch of the app.
 - iii. Account registration (creation) occurs through the "/user/create" REST endpoint, and in the response, the server returns a random, 40-character hex-string that serves as a secret token (field *user_secret*).
 - iv. An option in the Settings menu will allow the user to change their account, including signing up for a new account. There are presently no plans to allow the user to complete delete their account.
- c. *Without* an account, an anonymous user may:
 - i. View episode reviews and ratings.
 - ii. View comments on reviews.
 - iii. View the "Agree" percentage for a review.
- d. With an account, a user may:
 - i. Do all the above.
 - ii. Review an episode.

- iii. Rate an episode.
 - iv. Write a comment on a review (if the reviewer allows comments).
 - v. Add a show to Favorites
 - vi. Mark “Agree” or “Disagree” on a review.
 - e. The user may set their “Display Name” – the name under which their reviews and comments are posted.
 - f. Preferences:
 - i. “Allow comments on my reviews.”
 - ii. Checkboxes to show or display main page views: “My Reviews”, “Discussion”, “Recently Viewed”, and “Favorite Shows”
2. **Rating episodes**
- a. Registered users may rate an episode by selecting between 1 and 5 stars in a “rating” widget.
 - b. Once enough ratings have been submitted for an episode (a minimum of perhaps 10), then the aggregate of the ratings is displayed in the episode’s view (all users can then view this aggregate rating).
 - c. If it is determined to be feasible from a database perspective, users shall be prevented from submitting more than one rating for the same episode.
3. **Reviewing episodes**
- a. Registered users may review an episode. A review may be short (above some lenient minimum character length) or long (a generous maximum length).
 - b. There are no rules against spoilers in this app: this is where fans of a show discuss an episode that presumably all participants have seen, posit theories, rant, and so forth.
 - c. ***If the user is the first to review any episode of a T.V. series:***
 - i. From the user’s perspective, this is unobtrusive. When the user searches for a T.V. show, the backend TV database API is used to generate the closest results. The shows in this result list may not yet have any TV Fanatic reviews or ratings, but they still appear in the results list. If the user opens a series that does not yet have reviews, a fresh page for that series (but with zero reviews) will be opened, with the usual options to rate, add review, etc.
 - d. A simple anti-vulgarity filter.
4. **Commenting on reviews**
- a. A registered user may comment on other users’ reviews.
 - b. This activity behaves much like a simple message board or forum.
 - c. In V1, the only option will be a basic flat view of comments (hierarchical, in which replies are nested below the comment to which they reply, may come later).
5. **Adding shows to Favorites list**
- a. An “Add to Favorites” button in the View Show activity adds the show to the user’s list of favorites. When viewing Favorite shows, the button instead reads “Remove from Favorites” (and is less conspicuous – smaller, faded contrast, or similar).
 - b. In the main activity, favorite shows are displayed in a pane near the bottom of the screen. Each displayed show is a quick-link back to that show.
6. **The server**
- a. The client app describes the general layout of each view; the server provides the data to place in the components of the view. Data transfer is heavily asynchronous.

- b. The server will be written in **PHP**, supported by a framework such as CakePHP.
- c. The client and server exchanges requests and responses in **JSON** format. The server adheres to a **RESTful** architecture.
- d. Television Data API: Each television series is associated with a small amount of static data: a title card image, the series description, launch and end year, creator, and starring actors/actresses. There are several possible sources for this data: the Netflix REST API, thetvdb.com, and IMDB. The server interfaces with this API and obtaining this data upon request from a client. Once obtained, the data is stored (cached) in our own database to circumvent future calls to the API.

7. Database

- a. The server maintains a database which stores registered users, reviews, ratings, comments, static data on reviewed episodes, pertinent show info, and some supporting tables. See **ER Diagram** for details.
- b. The DBMS of the current release is **SQLite**.

8. User interface

- a. **Action bar**: An action bar at the top of each activity features: the application logo, a refresh icon (re-queries server for content), and a settings icon (opens preferences dialog). A search icon (main activity) causes the standard search box to appear by the application logo.
- b. Every activity can be oriented in both landscape and portrait.
- c. The **Main activity** provides a search box to search for TV shows by name. An auto-complete feature provides the closest matches based on known TV series (drawn from the database), and these matches populate a list that drops down from the search box. Other views in the activity show image-based links to the user's most recently viewed shows, favorite shows, the user's most recently written reviews, and a Discussion pane showcasing recent replies to the user's reviews.
- d. The **View TV Show activity** features the "cover" image of the show, the series description, the year span, the starring actors/actresses, the series aggregate rating, and a "season view" listing the aired episodes in a particular season. An "Add to Favorites" button places the show on the user's favorite list. By default, the current (most recent) season is displayed. Swiping horizontally in this view moves back and forth between past and more recent seasons. Each episode entry in the season view shows the episode number and name (perhaps also its air date), its current aggregate rating, and the number of submitted reviews.
- e. The **View Episode activity** features the official episode summary (if this info is easily obtained over the TV database API) and air date. A Ratings pane in the upper-right corner displays the average season rating, this episode's rating, and a rating widget to allow the user to rate the episode (if they haven't done so already) – or the user's selected rating (if they have rated the episode). A Review button takes the user to the Write Review activity. The central view is a summary list of user reviews. Each entry in the review list displays the review's title, the reviewer's display name, the first X words of the review, the "Agree" percentage, date/time of review, and "# comments".
- f. The **View Review activity** displays the review in full, the Agree percentage, the Agree/Disagree buttons (enabled for registered users), Add Comment (+) button (enabled for registered users) as well as a collapsible, scrollable side pane with the comments this review has sparked. Each comment displays the commenter's display name, the date & time of the comment, and the full text of the comment. Tapping a comment selects it, and a "Reply" button appears beneath the comment.

- i. Both the Add Comment and Reply buttons result in a Write Comment view appearing. Add Comment inserts this view at the top of the Comments pane. Reply inserts the Write Comment view directly beneath the comment to which the user is replying. The Write Comment view consists of an editable text view and Done and Cancel buttons.
- g. The **Write Review** activity features a large text view into which the user may input the review, a Title text view, with a Done button that submits the review to the server for storage. If the review meets constraints (non-empty title, review length is within acceptable bounds), the review is submitted to the server, and the client is returned to the View Episode activity for the reviewed episode. Otherwise, an overlay popup message informs user of the problem; pressing OK (only button) closes the overlay, leaving them in the Write Review activity to correct the issue.

Screenshots

1. Main activity

t.v. Fanatic

YOUR REVIEWS

Breaking Bad (2008)
Prison Break (2005)

DISCUSSION

RECENTLY VIEWED

GAME OF THRONES S2 E3 *What Is Dead May Never Die* 92% agree
A character's loyalties are put to the test 12 +5

List of user's most recent reviews.
Displays episode name, review title, current Agree %, total number of comments, and number of new comments.
Sorted by number of new comments, then by date of review's most recent comment (goal is to show the most relevant, new information).

Recent replies to user's comments.

FRINGE
BORGAS
MAD MEN
HOUSE

FAVORITE SHOWS

LOST
HOMELAND
dead like me
Breaking Bad
GAME OF THRONES
CRIMINAL MINDS
SUPERNATURAL

8:59

2. View TV Show activity

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Breaking Bad 2008-Present

Creator Vince Gilligan

Starring Bryan Cranston, Anna Gunn, Aaron Paul

Informed he has terminal cancer, an underachieving chemistry genius turned high school teacher uses his expertise to secretly provide for his family by producing the world's highest quality crystal meth.

Add to Favorites

SERIES AVERAGE
★★★★★


SEASON 5

1 Live Free or Die 872 Reviews 7.16.12 ★★★★★	5 Dead Freight 455 Reviews 8.12.12 ★★★★★
2 Madrigal 425 Reviews 7.22.12 ★★★★★	6 Buyout 702 Reviews 8.19.12 ★★★★★
3 Hazard Pay 511 Reviews 7.29.12 ★★★★★	7 Say My Name 699 Reviews 8.26.12 ★★★★★
4 Fifty-One 621 Reviews 8.5.12 ★★★★★	8 Gliding Over All 1,056 Reviews 8.2.12 ★★★★★

8:59

3. View Episode activity

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Breaking Bad S5 E7
Say My Name
8.26.12

In the desert, Walter meets with the Phoenix crystal meth distributors to set up a new partnership. Mike's out, Jesse wants out, Skyler's checked out, and Hank's boss wants him to stop spending time and resources on pursuing Mike. Walt needs to get the bug out of Hank's office, and Hank may have one more play.


Review

SEASON AVERAGE
★★★★★
THIS EPISODE
★★★★★
YOUR RATING
★★★★★

An interesting turn of events...
By Jesse502
87% agree
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10.23.12 1:23 AM
12 comments

Heisenberg!
By ABQ
23% agree
Typi non habent claritatem insitam; est usus legentis in iis qui facit eorum claritatem. Investigationes demonstraverunt lectores legere me lius quod ii legunt saepius. Claritas est etiam processus dynamicus, qui sequitur mutationem consuetudinum ...
10.16.12 3:12 PM
3 comments


Best episode of the season yet
By GustavoTheBoss
75% agree
Claritas est etiam processus dynamicus, qui sequitur mutationem consuetudinum lectorum. Mirum est notare quam littera gothica, quam nunc putamus parum claram, anteposuerit litterarum formas humanitatis per seacula quarta decima et quinta ...
9.25.12 11:42 PM
0 comments



8:59

4. View Review activity

t.v. Fanatic



Breaking Bad S5 E7
Say My Name
87% agree
Agree Disagree

Review by: **Jesse502**

An interesting turn of events...

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi.

Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Typi non habent claritatem insitam; est usus legentis in iis qui facit eorum claritatem. Investigationes demonstraverunt lectores legere me lius quod ii legunt saepius. Claritas est etiam processus dynamicus, qui sequitur mutationem consuetudinum lectorum.

COMMENTS


Jahabel wrote: 9.28.12 1:38 AM
I definitely agree with your assessment, J-Dog. Great review!

SeriousSam wrote: 9.28.12 1:57 AM
This is America. No one even speaks Latin any more!

DavidJones wrote: 9.29.12 10:12 AM
What do you mean they're not going to finish the season until next summer? You're crazy, man. No way they'd do that to us!

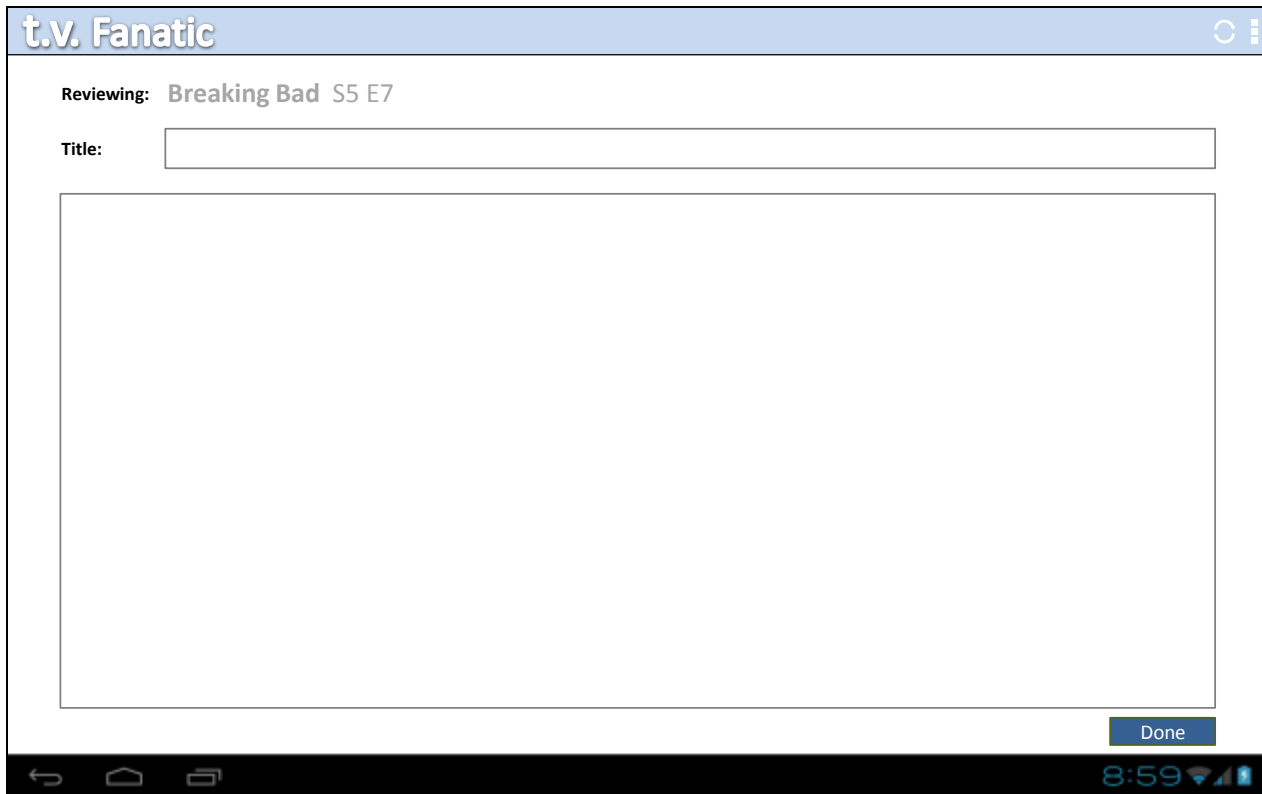
TepidTim wrote: 9.29.12 2:59 PM
I've gotta agree with DJ on this one. You can't delay the second half of a season for a whole year! By definition, that makes it the *next* season.

Jahabel wrote: 10.1.12 4:02 AM
It's true, tho. Comes back summer 2013! Ahhhh!

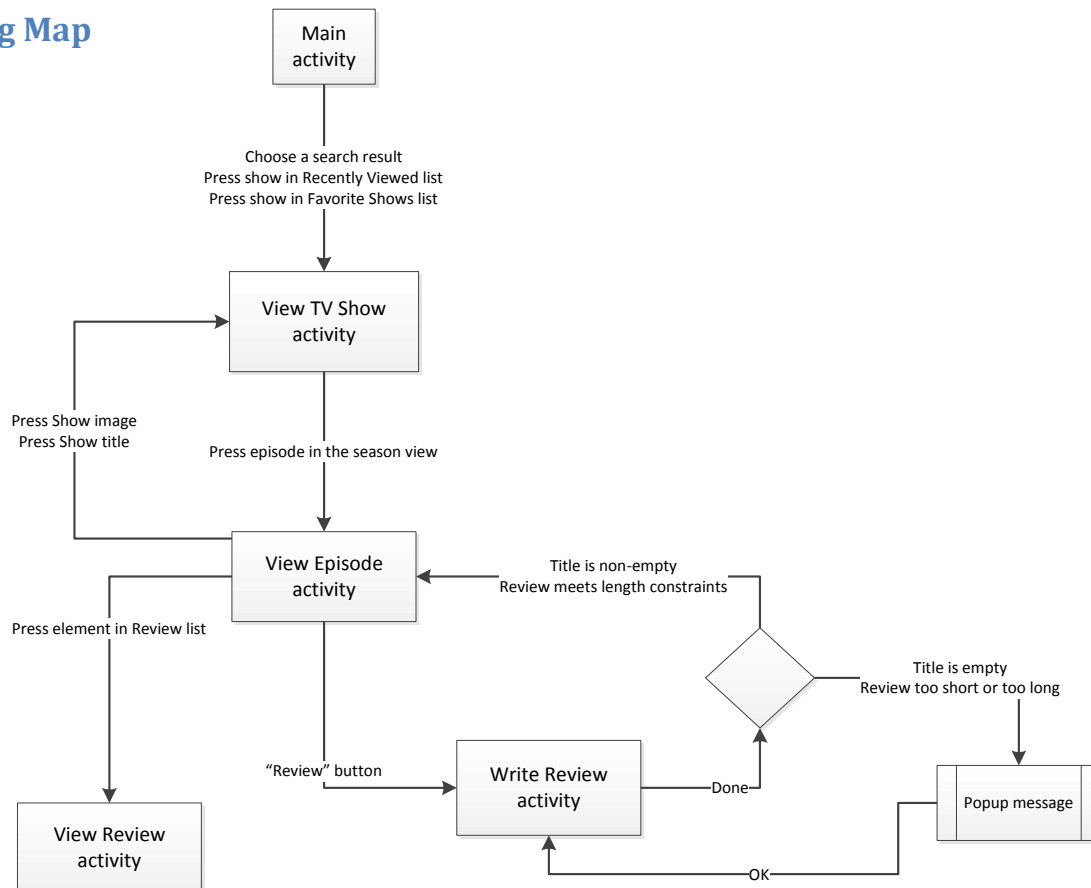


8:59

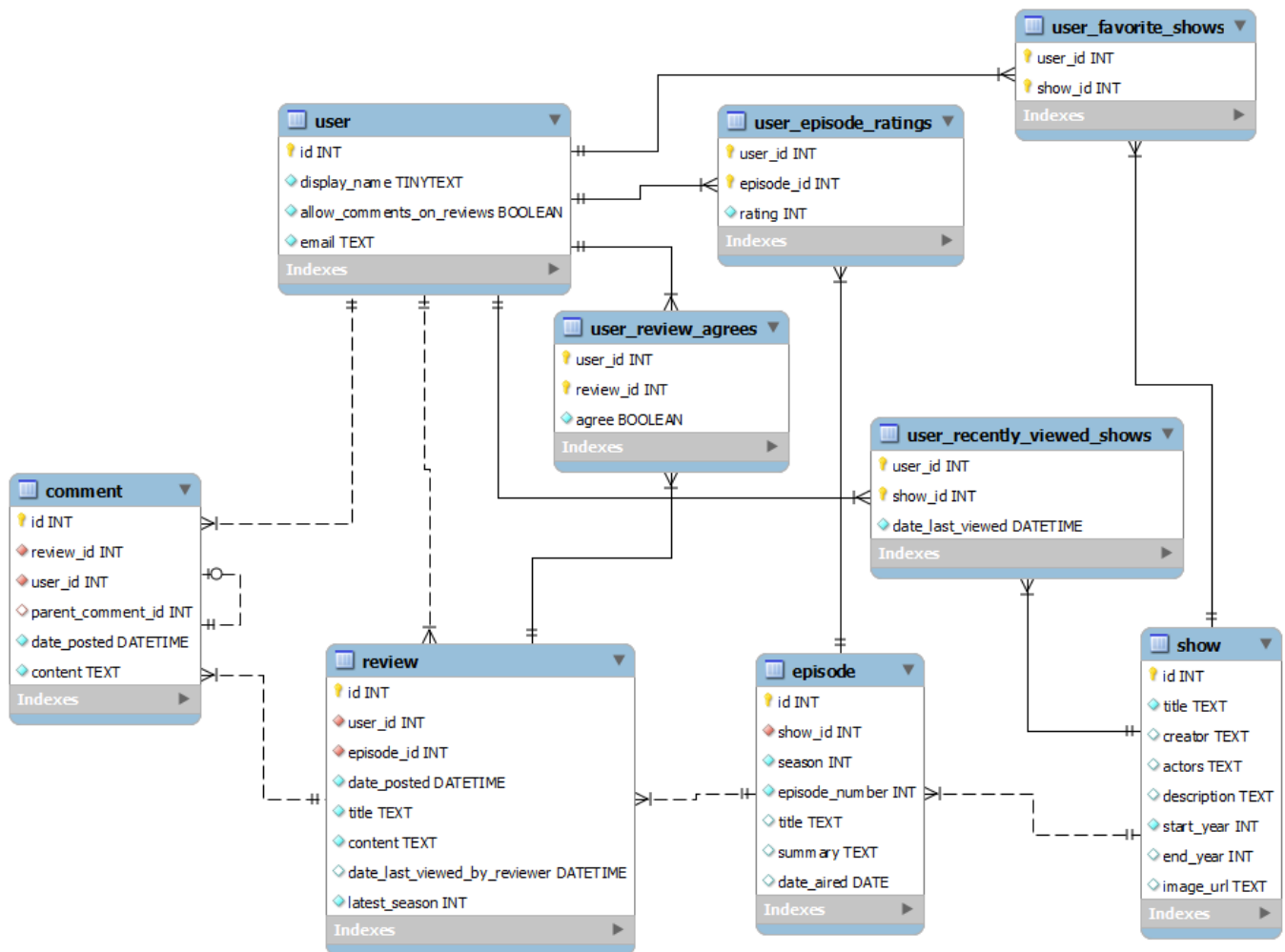
5. Write Review activity



Dialog Map



ER Diagram – Database Schema v3



New fields:

1. user.email
2. show.latest_season (field incorrectly shown in review, but in actual database, it is in show)

Appendix

Software Used

1. MS Word
2. MS PowerPoint
3. MS Visio
4. Graphics Gale (Paint program)