

Assignment 1 – TokTik

Report

OO Design

My design includes 8 classes, which all form the basis and functions of the TokTik application. The memory storage classes are BinarySearchTree, BinarySearchTreeTest, BinaryTreeNode, BTQueue, and BTQueueNode which when all put together make a Binary Search Tree that is able to store the many Accounts and Posts that are stored from a inputted file. The BinarySearchTree class is the main class where all other classes such as BinaryTreeNode, BTQueue and BTQueueNode are used to perform such storage functions. The other 3 classes that I used are the Posts, Account and TokTik which produce the objects that are taken from the file and allow them to be stored in the binary search tree as an account object. The Account class uses the Posts class to make a more easier and simpler version of an Account. The interface is run from the TokTik class which is where the binary search tree is filled with nodes in the form of Account objects. The classes interact with the construction of the BinarySearchTree which starts in the BinaryTreeNode class which does the construction of each node in the tree, next the BTQueueNode class interacts with the BinaryTreeNode class and forms the structure of the order methods of the tree, next we have the BTQueue class which orders the nodes of the tree, then most importantly we have the BinaryTree class which allows for the size, height and the multiple methods of ordering to be done to the nodes of the Binary Tree. For the TokTik application I used the InOrder queue method. Then comes our main class the BinarySearchTree which performs all the actions and methods that can be done on the tree such as find, insert and delete, which use all the BinaryTree classes mentioned before. In regards to the other classes the Posts class creates a post object which is used in the Accounts class to make the Posts link between an account and what posts they have created. Then finally the TokTik class which interacts with both the Accounts and Posts class to create Account objects and flood the Binary Tree with objects for its nodes.

Test Values

Choice 1

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

1

Enter the account name:

Matthew

Sorry that name hasn't been created yet!

Choose an action from the menu:

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

1

Please load Accounts and posts!

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

1

Enter the account name:

Zuckuss9

The profile description is: goldsmith's grape's locomotive's

Choice 2

Choose an action from the menu:

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

2

Please load Accounts and posts!

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

```
2
ZamWesell0 glinting denouement's incongruity's
ZamWesell1 leeks reopen showmanship's
ZamWesell2 Brummel interminably impression's
ZamWesell3 unhappiness's minutiae junta
ZamWesell4 backfiring clichéd Lancaster's
ZamWesell5 littorals selvages peccadillo's
ZamWesell6 mutinied allergen sorrier
ZamWesell7 interrupt's permissiveness's potentialities
ZamWesell8 dishes secession's coordinators
ZamWesell9 brushes stripper's expiation's
ZayneCarrick0 dialogues subcontract's colliery's
ZayneCarrick1 nude Mixtec's Leno's
ZayneCarrick2 scuba's extraterrestrial's Bissau's
ZayneCarrick3 Zoroastrianisms Cook electrolysis
ZayneCarrick4 profits height's automaton
ZayneCarrick5 hyphenation's straying fettle
ZayneCarrick6 proxy's casuist's busying
ZayneCarrick7 Seiko's generic theocratic
ZayneCarrick8 misbehaved unleash muckrakers
ZayneCarrick9 trickery's covered lenders
Zuckuss0 deformation's slyer finesse's
Zuckuss1 adjustors adapt Eichmann
Zuckuss2 opposite's actor's romper's
Zuckuss3 demographics's dedication camshaft
Zuckuss4 Osceola Calexico Hawthorne
Zuckuss5 too crofts rustiest
Zuckuss6 elicit overbite clarioning
Zuckuss7 Mahavira theocratic gadget
Zuckuss8 Kim's Sheridan's puzzle
Zuckuss9 goldsmith's grape's locomotive's
```

Values are continued...

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

Enter your choice:

```
3
```

Choice 3

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
3

Please load Accounts and posts!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
3

What do you want your account name to be?
Matthew
What do you want your description to be?
I love computer science!

Account has been added!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
3

What do you want your account name to be?
VisasMarr9
What do you want your description to be?
Sorry this name is already taken!
```

Choice 4

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
4
```

```
Please load Accounts and posts!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
4
```

```
What is the name of the account you want to delete?
fasdfs
```

```
Sorry that account name does not exist!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
4
```

```
What is the name of the account you want to delete?
Watto9
```

```
The account has been deleted
```

Choice 5

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
5

Please load Accounts and posts!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
5

Enter the account name
Watto9

Title: garishly Romania's chariot boyfriends Torres's
Video: video6271.mpg
Number of likes: null

Title: unstoppable Berta's prizefighter's inactivity Cid's
Video: video6272.mpg
Number of likes: null

Title: sexy escapees contravention's handbill's overpowers
Video: video6273.mpg
Number of likes: null
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
5

Enter the account name
afsd

Sorry that account name does not exist!
```

Choice 6

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
6

Please load Accounts and posts!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
6

What is the name of the account you want to add a post to?
afasfds
Sorry this account does not exist!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
6

What is the name of the account you want to add a post to?
ZamWesell9
What is the title of the post?
Gamer
what is the name of the video file?
video69.mp4
How many likes does the post have?
420
Post added!
```


Choice 7

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
7

What is the name of the file loaded in disk?
dsafsad.txt
File not found!
```

```
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
7

What is the name of the file loaded in disk?
dataset.txt
```

```
Add Obi-WanKenobi9 video6155.mpg 7846 kiddoes rivalry's segmentation Chantilly's DC's
Add Obi-WanKenobi9 video6156.mpg 8216 Kandinsky polysyllabic exacted cringes perihelia
Add Obi-WanKenobi9 video6157.mpg 3960 counterfeiters monstrosity relinquishing tailwind endorsement's
Add Obi-WanKenobi9 video6158.mpg 6261 springtime's subsistence's swat Rotarian's shush
Add Obi-WanKenobi9 video6159.mpg 3897 exits investor goal's grosbeaks revolutionizes
Add PadméAmidala9 video6163.mpg 8940 Challenger scowled Camembert's Dominguez swirl's
Add PadméAmidala9 video6164.mpg 491 Stravinsky Timur Squanto's silences bents
Add PadméAmidala9 video6165.mpg 3799 womanizer accumulators Firefox's oblong Darlene
Add Pl0Koon9 video6173.mpg 6249 Liechtenstein's adobes Evansville gimme sleeper's
Add Pl0Koon9 video6174.mpg 1423 lengthening egregiously dearer Scarlatti sailings
Add PrinceXizor9 video6185.mpg 3874 eaglet's Akron timetable wilful unzips
Add PrinceXizor9 video6186.mpg 7316 musicale variance Veltsin staterooms Scaramouch
Add PrinceXizor9 video6187.mpg 7744 wrecked Toyota bankroll pugnacity Zubenelgenubi
Add PROXY9 video6201.mpg 2804 brochure's vigorous triads Blacksburg mealtime
Add PROXY9 video6202.mpg 1437 electorates Salton's sightseer's entryways perspiration
Add PROXY9 video6203.mpg 5367 mile Rossetti's worldliness Caucasian freckling
Add PROXY9 video6204.mpg 7932 icter Bowell Python ads Klondikes
Create QuinlanVos9 decision's semiprofessionals cessation's
Add RahmKota9 video6215.mpg 302 devoting flusters Quaoar's codifying tooled
Add RahmKota9 video6216.mpg 7394 garrison castaway's doll's winnow melanomas
Add RahmKota9 video6217.mpg 4817 cornice reflexive Melendez's compromising conferencing
Add RahmKota9 video6218.mpg 7207 milestone Hertzsprung mickeys enthusiast's skirting
Add RahmKota9 video6219.mpg 3862 authenticated Mussolini unmercifully airdrop beaned
Add SavageOpress9 video6236.mpg 9019 colones extensional ceremonially asphyxiation's widows
Add SavageOpress9 video6237.mpg 6316 glowering virtuousness's waterboarding pottery fettering
Add TalonKarrde9 video6250.mpg 522 Aludra weighing reconvene Mahfouz's bishoprics
Add VisasMarr9 video6266.mpg 7243 limbered scorers entropy's Facebook's impel
Add VisasMarr9 video6267.mpg 2031 Sheol seminar genii fastening Mozambique
Add VisasMarr9 video6268.mpg 5019 sobbed ion's debaters itinerary's Topeka
Add VisasMarr9 video6269.mpg 6295 juxtaposes capons liveable bordellos revolver
Add VisasMarr9 video6270.mpg 5809 squeamish CB forelock neurotics breaststrokes
Add Watto9 video6271.mpg 4045 garishly Romania's chariot boyfriends Torres's
Add Watto9 video6272.mpg 3858 unstoppable Berta's prizefighter's inactivity Cid's
Add Watto9 video6273.mpg 1718 sexy escapees contravention's handbill's overpowers
Add ZamWesell9 video6304.mpg 9219 Sadie's vigil defiance picturesque sterling
Create Zuckuss9 goldsmith's grape's locomotive's
File Loaded!
```

Output continues...

Choice 8

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
8

TokTiK closing...
```

```
Choose an action from the menu:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
9

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Enter your choice:
```

Creativity

For creativity I only added a closing TokTik logo when the user decides to exit the system

Statistics

```
0: commit d006725a9d3dd6a7bc9c8367b884020681108c4f
1: Author: Matthew Schramm <mattschramm1235@gmail.com>
2: Date: Wed Apr 19 16:16:43 2023 +0200
3:
4: Final Version
5:
6: commit 41a4b0b04b6b9f8b5a3912d9836b4dbbd5b3c040
7: Author: Matthew Schramm <mattschramm1235@gmail.com>
8: Date: Wed Apr 19 11:05:58 2023 +0200
9:
...
19: Author: Matthew Schramm <mattschramm1235@gmail.com>
20: Date: Tue Apr 18 16:38:53 2023 +0200
21:
22: Done everything except adding file transfer
23:
24: commit 7fecb80266363f67d16a5fc167a1e4f2dc9e9c89
25: Author: Matthew Schramm <mattschramm1235@gmail.com>
26: Date: Wed Apr 12 12:12:22 2023 +0000
27:
28: First Version
```