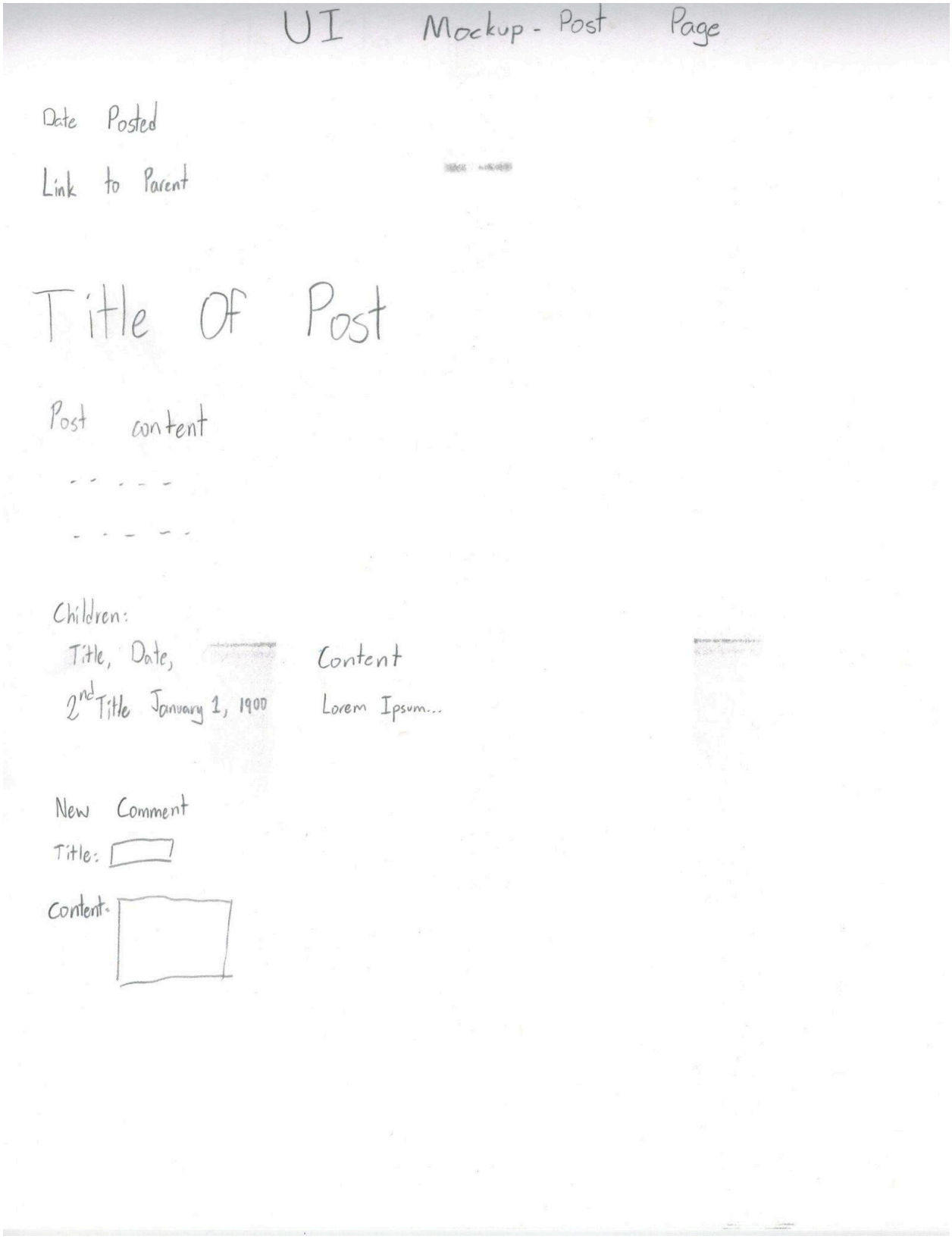
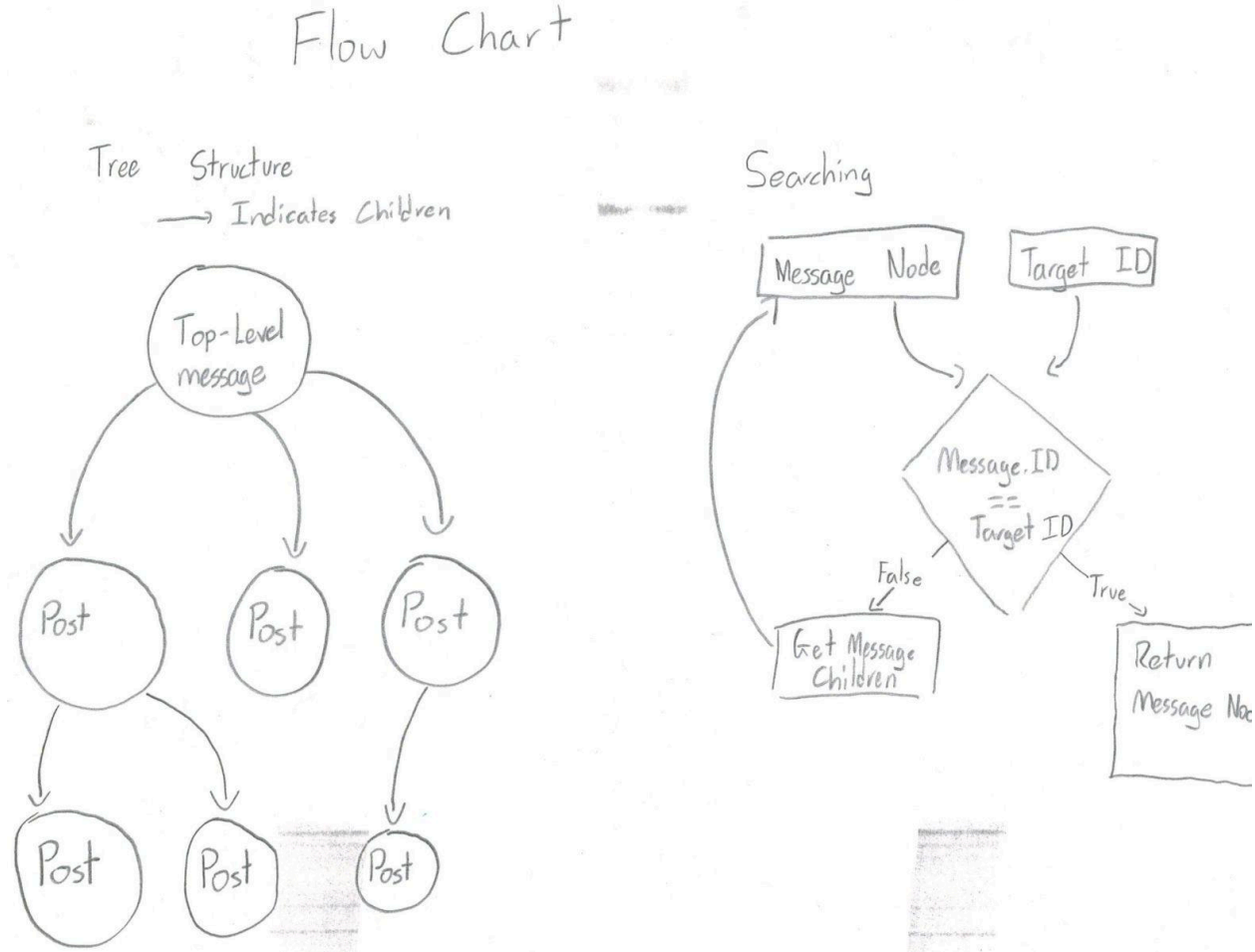
UI Mockups


UI Mockup - Post Page
Date Posted
Link to Parent
Title Of Post
Post content
Children:
Title, Date,
Content
2nd Title January 1, 1900
Lorem Ipsum...
New Comment
Title:
Content:

Flow Charts


Flow Chart
Tree Structure
→ Indicates Children
Top-Level message
Post
Post
Post
Post
Post
Post
Searching
Message Node
Target ID
Message.ID == Target ID
False
True
Get Message Children
Return Message

UML

Util
- messages: List<Message>
- tree: MessageTreeNode
+ dateToMilliseconds(int year, int month, int day): long
+ padId(long id): String
+ getId(String id): long
+ getDateTime(long id): String
+ loadMessages(): void
+ getMessages(): List<Message>
+ getMessage(String id): Message
+ saveMessage(Message message): Message
+ buildTree(): void
+ getTree(): MessageTreeNode
MessageTreeNode
- message: Message
- children: ArrayList<MessageTreeNode>
+ MessageTreeNode(Message message)
+ findMessageBFS(long id): MessageTreeNode
+ findMessageDFS(long id): MessageTreeNode
+ findMessageRecursive(long id, MessageTreeNode curMessage): MessageTreeNode
+ addNode(Message otherMessage): void
- addChild(MessageTreeNode child): void
+ getMessage(): Message
+ getChildren(): ArrayList<MessageTreeNode>
Message
id: long
parent: long
title: String
content: String
+ Message(long id, long parent, String title, String content)
+ Message()
+ getMessage(): Message
+ getId(): long
+ setId(long id): void
+ getTitle(): String
+ setTitle(String title): void
+ getContent(): String
+ setContent(String content): void
+ toCsv(String deliminator): String
+ getDate(): String
+ getParent(): long
+ setParent(long parent): void

Test Number	Nature of Test	Method of testing and expected results
Test 1	Messages can be posted back	When the user submits the message, it appears within the database
Test 2	The Tree can be built	The method for building the tree runs without error
Test 3	The Tree is searchable	Searching for an ID returns the child. Searching for an ID that does not exist returns null
Test 4	Messages can be displayed	Items in the CSV can be seen on the HTML
Test 5	HTML is navigable	Every aspect of the website can be visited solely by visiting hyperlinks