Local News Web App
Product Requirements Document

Part I

Problem We Are Trying to Solve
None.

Value Proposition and Marketing Statements
None.

Solution Summary
Create a news web app tailored for both consumers and curators of news.

Part II

Functional Requirements

1. Create a web crawler that will harvest data from, at minimum, the following sources:
    a. *Oakdale Leader*: https://www.oakdaleleader.com/news
    b. *Riverbank News*: https://www.theriverbanknews.com/news
    c. *Modesto Bee*: https://www.modbee.com/news/local
    d. *Tracy Press*: https://www.ttownmedia.com/tracy_press/news
    e. *Ripon News*: https://www.myripon.com/blog/categories/news
    f. *Turlock Journal*: https://www.turlockjournal.com
        i. This web crawler should capture, at minimum, the following information:
            1. Article heading
            2. Article sub-headings
            3. Article content
                a. This includes any media and captions for that media.
            4. Article author
            5. Article date
        ii. Based on the content of the article, the web crawler should categorize the article.
            1. This should include a main category (e.g., News, Sports, etc.) and a sub-category (e.g., Breaking News, Local News, etc.)
2. Create a front page that will display a variety of articles, and articles categorized as "Breaking News."
3. Create a navigation bar, with the following items:
    a. News
        i. When clicked, navigate the user to the News page.
    b. Sports
        i. When clicked, navigate the user to the Sports page.
    c. Staff
        i. When clicked, navigate the user to the Staff page.
    d. Log In
        i. When clicked, navigate the user to the Log In page.
    e. Subscribe
        i. When clicked, navigate the user to the Subscribe page.
4. Create a News page that will display articles from the following categories:
    a. Breaking News
    b. Local News
    c. Crime
    d. Government
    e. Education
5. Create a Sports page that will display articles from the following categories:
    a. High School Sports
    b. Local Sports

6. Create a Staff page that will display a list of staff members currently employed or contracted to work on the website.
    a. For each staff member, display the following information:
        i. Staff name
        ii. Staff email address
        iii. Staff phone
7. Create a Register page.
    a. The Register page will have the following form fields:
        i. Email Address
        ii. Password
        iii. Confirm Password
        iv. Account Type
            1. This will be a dropdown that allows users to select an account type, with two options:
            2. User
            3. Business
                a. If "Business" is selected, add the following form fields:
                    i. Mobile Phone Number
                    ii. Business Name
                    iii. Business Website
        v. Users with the "Business" account type selected are automatically assigned all available user permissions.
8. Create a Log In page.
    a. The Log In page will have the following form fields:
        i. Email Address
        ii. Password
    b. A "Forgot password?" link will navigate the user to the Reset Password page.
    c. After successfully authenticating, the user may be navigated to another page depending on their account type.
        i. If the user has a "User" account type, navigate the user to the home page.
        ii. If the user has a "Business" account type, navigate the user to the Business Panel page.
9. Create a Reset Password page.
    a. The Reset Password page will have the following form fields:
        i. Email Address
    b. Once the user submits the form, an email will be sent to the email address provided, with the following template:
        i. Subject: "Bay Valley Tech News – Password Reset"
        ii. Content: "You've requested that the password be reset for your account. To reset your password, copy and paste this link:" followed by the password reset link.
10. Create a Confirm Reset Password page.

      a. If a user copy-pastes a reset password link via email, the user should be redirected to this page, with the following form fields:
- i. Password
- ii. Confirm Your Password

      b. Passwords should enforce the following criteria:
- i. Passwords must be at least 12 characters in length
- ii. Passwords must include a special character
- iii. Passwords cannot include any of the following strings (regardless of case):
  1. "password"
  2. "123"
  3. "1234"
  4. "12345"
  5. "123456"

11. Create a Subscribe page.
      a. Display a list of news categories, allowing the user to select what categories they want to subscribe to.
      b. Display a form field that allows the user to select the frequency of subscription updates, with the following options:
- i. Hourly
- ii. Daily
- iii. Weekly
- iv. Biweekly
- v. Monthly

      c. Display a form field that allows the user to select the delivery method of subscription updates.
- i. Email
- ii. SMS

12. Create a Business Panel page.
      a. Create a side navigation menu with the following items that, when clicked, will navigate the user to the corresponding page:
- i. Articles
- ii. Users
- iii. Settings

      b. Articles page.
- i. Display a button that will navigate the user to the New Article page.
- ii. Display a table with every article created by that business, with the following columns:
  1. Article ID
  2. Article Name
     - a. This field may be derived from the article heading
  3. Number of Engagements
     - a. This field is driven by the number of views for that article.
  4. Actions

                a. Display an edit and delete icon button.

  c. New / View Article
- i. Display a form with the following form fields:
    1. Heading, as a text field
    2. Sub-heading, as a text field
    3. Content
        a. This should be a rich-text editor, also allowing users to insert media (pictures, sounds, etc.) in the form field.
    4. Author
        a. This is a dropdown of users within the business.
    5. Allow Comments, as a checkbox.
        a. When unchecked, prevent users from posting comments on the article.
    6. Allow Anonymous Comments, as a checkbox.
        a. This should only be displayed if the "Allow Comments" checkbox is checked.
        b. When unchecked, prevent anonymous users (users that are not authenticated) from posting comments on the article.
    7. Save button
    8. Cancel button

  d. Users
- i. Display a button that will navigate the user to the New User page.
- ii. Display a table with every user for the business, with the following columns:
    1. Name
        a. This field may be derived by the first and last name of the user
    2. Mobile Phone Number
    3. Email Address
    4. Actions
        a. Display an edit and delete icon button.
    5. Save button
    6. Cancel button

  e. New / View User
- i. Display a form with the following form fields:
    1. First Name, as a text field
    2. Last Name, as a text field
    3. Mobile Phone Number, as a text field that only accepts numbers, parenthesis, hyphens, and spaces.
    4. Email Address, as a text field that only accepts valid email addresses.
    5. Notes, as a rich text editor.
    6. Disable Login, as a checkbox.

a. When checked, prevent the user from logging in to the app and display the following error message: "Your login has been disabled. Please contact the system administrator."

ii. Display a section, allowing the user to select what permissions should be assigned to the user.
  1. The following permissions should be available to users:
     a. Articles
        i. Read-only
        ii. Write
        iii. Delete
     b. Users
        i. Read-only
        ii. Write
        iii. Delete

f. Settings
   i. Display a form with the following form fields:
      1. Notifications – New Comment, as a checkbox.
         a. When checked, send the business admin an email whenever a user posts a comment on an article created by that business.
   ii. This is only available to the business admin.

13. Create a cron (or something similar to a cron) that will process all subscription updates.
14. For any article with comments enabled, allow both authenticated and anonymous users to post comments.

Technical Requirements and Constraints
1. Ensure that a password reset link cannot be used after 3 hours.
2. Ensure that a password reset link cannot be used more than once.
3. Anonymous comments posted on articles should be limited to one per article per IP address.

Key Assumptions
- The news websites may implement some anti-crawling countermeasures. This PRD assumes that we will be able to harvest data regardless.

Scope Prioritization

Item	MVP	MCP	Future	Constraint/Description
Add the ability for businesses to hide articles from public view		x		
Add the ability to send a summary of comments and article analytics		x		Currently, we send an email notification immediately after a comment is posted on an article. We should allow businesses to configure this more granularly.
Provide news suggestions using the News API		x		https://newsapi.org/s/google-news-api
Provide news suggestions using the		x		https://console.cloud.google.com/apis/library/customsearch.googleapis.com?pli=1&project=poolorchard-1531088471614

Google Search API				
Provide news suggestions using the Bing Search API			x	https://www.microsoft.com/en-us/bing/apis/bing-web-search-api
Create a web API for third-party integrations			x	

Wireframes

None.