

## Alert Notification Prototype Epics

### Epic 1. Send Notifications

Functionality for administrative user to configure and send notifications.

### Epic 2. Profile Page

As a California Resident I want to subscribe to emergency and non-emergency email notifications.

Acceptance Criteria:

California Resident should provide a login name and email (login name can be email), first name, last name, and residence address

### Epic 3. Set-up Initial CI

As a developer, when I commit code to the master branch, it should be tested and deployed to the acceptance environment.

Acceptance criteria:

1. Commit code to the master branch
2. CI process runs existing automated tests on committed code
3. If any test fails, CI sends notification and does not continue processing
4. If all tests pass, CI updates acceptance environment with new code base

## Alert Notification Prototype User Stories

Natoma created the following user stories in association with the Prototype development. These stories exist in Pivotal Tracker as Backlog or Icebox items.

User Story Name	User Story	Acceptance Criteria
User Login	As a User of the system I want to login to use the California Notification System.	<ol style="list-style-type: none"> <li>The home/login page has the following fields: <i>email</i> password <ol style="list-style-type: none"> <li>The home/login page has the following button: *login - pressing this button will compare password for email address entered and if it matches the user will be logged in. Else an error message will be displayed.</li> </ol> </li> <li>The home/login page will show the following message: Don't have an account? &lt;link&gt; Create Account &lt;link&gt;</li> <li>Create Account link will open the Create Profile page.</li> </ol> <p>Anti-criteria Validation</p>
Investigate Jenkins as option for CI	Determine if Jenkins is a viable option for running the CI process for a .NET Core asp.net application.	The CI process for a .NET Core asp.net applications functions with Jenkins
Stand up development database server	Spin up a database in AWS that the entire development team can easily access	All members of the development team are able to access the database and perform a privileged action (e.g. create a table)
Document user interviews	As a Project Lead, I would like the end-user interviews documented and made accessible to the team, possibly using the GitHub wiki feature.	Set of end-user interviews are accessible to the team.
Paint View/Update profile pages	As a California resident, I want an HTML page for updating my profile	<ol style="list-style-type: none"> <li>Create Profile Page has the following fields <ul style="list-style-type: none"> <li>first name</li> <li>last name</li> <li>email</li> <li>password</li> </ul> </li> </ol>

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		<ul style="list-style-type: none"> <li>confirm password</li> <li>California residence address (consisting of) <ul style="list-style-type: none"> <li>Street</li> <li>City</li> <li>Zip Code</li> </ul> </li> <li>check box to "receive notifications"</li> </ul> <p>2. The update profile page has the following buttons</p> <ul style="list-style-type: none"> <li>Save</li> <li>Cancel</li> </ul> <p>3. Page must adjust for different resolutions</p> <ul style="list-style-type: none"> <li>1024 x 768 is base for PC</li> <li>800 x 480 is base for phones (both portrait and landscape)</li> </ul> <p>4. Page must pass verification from WAVE pluggin</p> <p>Anti-Criteria:</p> <ul style="list-style-type: none"> <li>Field validation</li> <li>Button functionality</li> </ul>
Add Docker support to .NET projects	As a DevOps engineer, I want the .NET projects to have Docker support files I can use to build Docker images.	Each .NET project that will be deployed using Docker images has the appropriate Docker files
Set Up SMTP endpoint for application emails	As the Technical Architect, I want to use SMTP Endpoint for handling application emails.	SMTP Endpoint is functioning in the prototype
Save Profile Information	As a California Resident I want my account / profile information to be saved so that I can view it and update it later.	Information entered by California Resident is saved to a database.
Update profile	As a California Resident I want to be able to change my subscription for email notifications	California Resident should be able to use profile/account information to login and change profile information including subscription to email notifications.
Build CI server	As a DevOps engineer, I need a server with Jenkins and support for .NET builds.	<ol style="list-style-type: none"> <li>Log into Jenkins</li> <li>Set up job to build ADPQ2 application</li> <li>Run job</li> </ol>
Add Privacy and Help Information	As a California Resident I want to know how my information is being used and I want to know who I	The following privacy information is included on the login page "Welcome to the California Notification System. This is a prototype system built for

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	can contact if I have any issues with the application.	<p>the state of California is response to Request for Interest # CDT-ADPQ-0117. Your information will be used to send notifications, but your information will not be sold or provided to anyone else."</p> <p>The following will be included on the footer of the login page: Issues? contact adpq2@natomatech.com</p>
Subscribe to SMS notifications	As a California Resident I want to subscribe to emergency and non-emergency SMS (text) notifications.	California Resident can provide a mobile number and accept to receive texts if they choose, acknowledging that they may have provider costs. Mobile number is required if a user selects check box to receive text notifications.
Update Profile page button functionality	As a California Resident, I want to be able to save or cancel the creation of a profile.	<ol style="list-style-type: none"> <li>Pressing cancel button returns the user to the landing page.</li> <li>Pressing save button persists all fields</li> </ol> <p>Anti-Criteria:</p> <ul style="list-style-type: none"> <li>Business rules</li> </ul>
Paint create profile page	As a California resident, I want an HTML page for creating a new profile	<ol style="list-style-type: none"> <li>Create Profile Page has the following fields <ul style="list-style-type: none"> <li>first name</li> <li>last name</li> <li>email</li> <li>password</li> <li>confirm password</li> <li>California residence address (consisting of) <ul style="list-style-type: none"> <li>Street</li> <li>City</li> <li>Zip Code</li> </ul> </li> <li>check box to "receive notifications"</li> </ul> </li> <li>The initial page has the following buttons <ul style="list-style-type: none"> <li>Create</li> <li>Cancel</li> </ul> </li> <li>Page must adjust for different resolutions <ul style="list-style-type: none"> <li>1024 x 768 is base for PC</li> <li>800 x 480 is base for phones (both portrait and landscape)</li> </ul> </li> </ol>

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		<p>4. Page must pass verification from WAVE plug-in</p> <p>Anti-Criteria:</p> <ul style="list-style-type: none"> <li>Field validation</li> <li>Button functionality</li> </ul>
Create Profile page button functionality	As a California Resident, I want to be able to save (create) or cancel the creation of a profile.	<p>1. Pressing cancel button resets all fields to blank state</p> <p>2. Pressing create button on the page persists all fields</p> <p>Anti-Criteria:</p> <p>* Business rules</p>
Set up profile	As a California Resident I want to subscribe to emergency and non-emergency email notifications.	As a California Resident I want to subscribe to emergency and non-emergency email notifications.
Administrator can send notifications by SMS	As an Administrative User I want to be able to send emergency and non-emergency SMS (text) notifications to subscribers.	An Administrative User can also indicate the text to send via SMS for the alert/notification.
Administrator can send notifications by email	As an Administrative User I want to be able to send emergency and non-emergency email notifications to subscribers.	An Administrative User can have the ability to send an ad hoc (Public Information) email message to subscribers based on California resident message preference(s).
Paint Send Notification Screen	As an administrative user I want an HTML page to send a notification to a group of users.	<p>1. The Page will include the following fields:</p> <ul style="list-style-type: none"> <li>Notification Type consisting of the following options <ul style="list-style-type: none"> <li>Blast</li> <li>Regional</li> </ul> </li> <li>Reference Location Information if Regional is selected <ul style="list-style-type: none"> <li>Street</li> <li>City</li> <li>Zip</li> <li>Send to Residents within selected Radius <ul style="list-style-type: none"> <li>20 miles</li> <li>50 miles</li> <li>100 miles</li> </ul> </li> </ul> </li> <li>Email Subject</li> <li>Email Message</li> <li>Text Message</li> </ul> <p>2. The Page will include the following buttons:</p>

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		<ul style="list-style-type: none"> <li>• Send</li> <li>• Cancel</li> </ul> 3. The following validation applies: <ul style="list-style-type: none"> <li>• Full Reference Location is required if Notification Type is Regional.</li> <li>• Email Subject, Email Message and Text Message are all required to send a message.</li> </ul>
Administrators set subject and text for email	As an Administrative User I want to be able to define the subject and text for an email notification.	An Administrative user is able to identify the subject for the notification as well as the text of the notification.
View Notification Metrics	As an Administrative User I want to view analytic information for notifications sent to California Residents.	1. Display a table to the user with metrics for the last 30 days with the following fields: <ul style="list-style-type: none"> <li>• Date</li> <li>• Delivery Method (Text or Email)</li> <li>• Count</li> </ul> 2. Display a simple line graph where the y axis is the count, the x axis is the date and there is a line for Text and a line for Email.
Validate profile page	As an Admin user I want the California Resident profile data to be valid so I can use it to send notifications	1. To create an account, the following is required: <ol style="list-style-type: none"> <li>a) email address is required.</li> <li>b) Password and confirm password are required and must match and be at least 8 characters long.</li> <li>c) First name is required</li> <li>d) Last Name is required</li> <li>e) Zip code format must be for California from 90000 to 96999.</li> <li>f) Full California Residence address is required (street, city, zip) is the check box to receive email notifications is checked.</li> </ol>
Identify Required Fields on all screens	As a user of the system I would like required fields to be identified so I don't click the submit/save, button and then get errors.	All required fields have an * at the end of the label.
Automatic test in CI	As a DevOps engineer, I want the automated tests to run before	1. Automated test runs before the code commit.

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	newly committed code is deployed.	2. Automated test results are provided.
Change SMS notifications	As a California Resident I want to be able to change my subscription for SMS (text) notifications	California Resident can change the mobile number used for text notifications and can "unsubscribe" from text messages as well.  The application requires the user to enter a mobile number if the user selects check box to receive text notifications.
View recent notifications	As a California Resident I want to be able to view notifications that I have received in the last 30 days in case notifications were sent out but not received on my devices.  Fields displayed are date, delivery method, and message (text message or email message).	The user has the ability to view the date, delivery method and message notifications that have been sent out over the previous 30 days
Administrator formats email as HTML	As an Administrative User I want to be able to format the email text to include bolding and underlining (HTML) format identifying the severity of the notification using the HTML.	As an enhancement/progression to the product, an Administrative user is able to format the email message as HTML to highlight important information and identify the severity based on the HTML.
Provide FAQ/Help Page	As a California Resident I want to be able to reference a Help or FAQ page to find answers to questions I may have about the system.	The application includes a link to a populated Help or FAQ page
Write Repository Readme.md	As a scrum master I want our project's repository to have a meaningful overview displayed on its GitHub page, so that the project's intent and focus is made accessible.	The Readme.md page describes the project's approach to the RFI requirements and is validated by the technical team.
Write Technical Approach	As the Technical Architect, I want our project's technical architecture to be described in the readme so that the architectural approach is made accessible.	The Readme.MP file includes the documented Technical Approach and is no longer than 2000 words.
Capture End User Prototype Reviews	As a project lead, I would like the end-user reviews of prototypes to be documented and made accessible to the team, preferably using the GitHub wiki feature.	Set of end-user reviews are accessible to the team.

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Docker images are accumulating in the CI	Docker images are not being removed at the end of the CI process. Additionally, they are all being sent to DockerHub each CI cycle. This can be seen by looking at the most recent runs of both CI jobs.	Docker images are removed at the end of the CI process.
Create acceptance application server	As a DevOps engineer, I want a server that is configured for the application server.	<ol style="list-style-type: none"> <li>1. Application server exposes port 80 to public for HTTP traffic</li> <li>2. Application server has a Docker container for the .NET core web application</li> </ol>
Create acceptance database server	As a DevOps engineer, I want a server that is configured for the database server.	<ol style="list-style-type: none"> <li>1. Database server is not exposed to the public</li> <li>2. Database server has a</li> <li>3. Docker container for the database</li> <li>4. Database server has a Docker container for the data access layer (.NET core) and API exposed to the application server (.NET core web application)</li> <li>5. Database server exposes port 80 to the application server</li> </ol>
Configure deployment to acceptance application server	As a DevOps engineer, I want to be able to deploy the application to the acceptance application server with minimal manual intervention.	<ol style="list-style-type: none"> <li>1. Run application deployment (three steps or fewer)</li> <li>2. Verify that application has been deployed properly to application server</li> </ol>
Configure deployment to acceptance database server	As a DevOps engineer, I want to be able to deploy the database to the acceptance database server with minimal manual intervention.	<ol style="list-style-type: none"> <li>1. Run database deployment (three steps or fewer)</li> <li>2. Verify that database has been deployed properly to database server</li> </ol>
Create continuous monitoring server	As a DevOps engineer, I want to see the status of the servers in the acceptance environment.	<ol style="list-style-type: none"> <li>1. Navigate to CM server</li> <li>2. Log in</li> </ol>
Find SMS Provider	Find SMS provider and set up testing account to test the API.	The SMS is identified and the API is functioning.
Implement Swagger	Implement Swagger for API documentation	API documentation has been created in Swagger
Investigate Icinga	Lookup what may be needed to get Icinga on the servers (docker image) for continuous monitoring.	Obtained feedback regarding Icinga's ability to perform continuous monitoring on the servers.



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Provide Multi-Language Support	As a California Resident I would like the alerts application to be available in my primary language.	The site allows for the ability to switch the site to provide content in another language. Initial other language will be Spanish.
Get Alert data from existing services	As an administrative user I want to get data from existing services that can be used to configure automated alerts to California Resident.	Automated alerts data has been identified and integrated into the application
Integrate Authentication with Facebook and Google	As a California Resident I want to be able to login using my existing Facebook or Google credentials so I don't have to remember so many passwords.	Login and create account provide options to use Facebook and google for authentication.
Verify Mobile Phone for Texts	As an administrative user I want the mobile phone number entered by users wishing to receive texts to be verified.	Upon account creation or profile update, when a user initially enters a mobile phone after selecting to receive notifications, they will be sent a text verification code to verify their mobile number. After the verified mobile number is saved, the user will be able to receive text notifications.
Verify Email	As the administrative user I want any email to be verified before any notifications are sent.	Upon creating an account with an email address or modifying an existing account's email address, the user will be sent an email with a link to verify their email address. Once the user accesses that link the system will mark the email as verified and able to receive notifications.
Create account using phone number	As a California Resident I want to have the option of creating an account using a phone number instead of an email address.	Application gives the user the choice of using the phone number or email address upon account creation.
Investigate Data Dog use instead of Icinga	Look into Data Dog as the Continuous Monitoring tool in place of Icinga	Data Dog provide continuous monitoring with the same or better benefit/value that Icinga
Select notifications	As a California Resident I want to choose which notifications I can receive says as flood notifications or severe weather, police actions and others	California Residents can choose which notification options to received based on topics that are of interest to the resident.
Weather notifications	As a California Resident I want to receive Weather notifications.	California residents can choose to receive weather notifications based on their choice of locations.

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Indicate evacuation assistance needed	As a California Resident I want to indicate whether I need help in an evacuation due to disability or medical issues.	Administration users can either can send priority texts or emails to California residents notifying them who to contact for evacuation assistance and/or the address to local emergency services personnel.
Multiple notification locations	As a California Resident I want to identify multiple locations for notification (i.e. home, work, elderly family location, etc.)	As an evolution of subscription, a user can create notification preferences for multiple locations (perhaps at the city level only), and identify the types of notifications for each city and whether they want email or texts.
Add additional notifications	As a California Resident I want to identify the types of notifications I want to subscribe to.	As the product evolves to support and include more events that can result in notification, a user could indicate a preference for those types of notifications
Administrator configure automatic notifications	As an Administrative User I want to configure automatic notifications based on available service data from state sources.	As a progression to the product, an administrative user can select a data source and configure a notification to send out based on source data (and source data lat/long) and radius to send notifications when this data is updated.
Password reset	As a California Resident I want to be able to reset my password if I forget it.	The user can reset his/her password.
Administrator password reset	As an Administrative User I want to be able to reset my password if I forget it.	Administrative users can reset their passwords
Create administrative users	As an Administrative User I want to be able to add additional Administrative users to the system	A seeded administrative user should have the ability to create additional administrative users that have the ability to send messages
Automate creation of continuous monitoring server	As a DevOps engineer, I want a scripted way to create additional CM servers	<ol style="list-style-type: none"> <li>1. Spin up new VM to use for CM server</li> <li>2. Run script with parameters to identify target VM</li> <li>3. Verify CM server on target VM</li> </ol>