

Pilot CRCTVN Website Using ColdFusion Functional Specifications

Version 1.3

September 27, 2002

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1. Revision History

Version	Date	Author	Revision Notes
1.0	Sep 3, 2002	Thanh Nguyen	First Draft
1.1	Sep 15, 2002	Thanh Nguyen	Added details
1.3	Sep 27, 2002	Thanh Nguyen	Added idea on how we can use directories and subdirectories to keep articles which can serve our GUI tree view, and allow CF search engine to work.

2. Overview

This doc describes the high-level functional specifications for the CRCTVN ColdFusion pilot project. The pilot project's main objectives are to enhance the existing static HTML CRCTVN website (www.crctvn.com) by first converting it into dynamic website using ColdFusion technology, then add the following features based on data driven interactions such as:

- Online New Member Registration
- News
- Guest Book
- Online Group Subscription
- List of Members
- Infrastructure and GUI to support the Health Care pilot project

Please send your ideas or suggestions to techteam@crctvn.com.

Please also notes that all examples and database table names used were mainly for illustration purpose only. Exact names are to be determined.

3. Features

3.1. Online New Member Registration

This feature allows users to register online to become a CRCTVN member.

3.1.1. Information Required

Currently our paper member registration form as the following info:

In order for us to effectively coordinate your participation and contribution, we need some general information from you. Please take a moment to fill out the following form.

We respect your personal information, and we ensure that your information will only be used by the administration team in coordinating tasks for CRCTVN members.

First Name: _____

Middle Name: _____

Last Name: _____

Address (optional): _____

City: _____

State/Province (optional): _____

Country: _____

Email: _____

Phone (optional): _____

Year of Birth (optional): _____

Occupation (optional): _____

Your strength/skill (optional): _____
(e.g. "Legal" or "C++", VB, Web development" or "Writing" or etc.)

Comments or Suggestions (optional): _____

On second page

Please select the team(s) you like to join:

- . Public Relation _____
- . Administration _____
- . Technical/Web _____
- . Content _____

Would you like to become an active member of the CRCTVN organization?

_____ (Yes/No)

We will update our web site and proudly list all team members with member name, city and country (e.g. Nguyen Chi Huy, Toronto, Canada). Would you like your name to be listed on CRCTVN web site, under the Member section?

_____ (Yes/No)

We can prompt the user for his email the second time to make sure he/she enters it correctly.

3.1.2. Data Processing

1. Once the form is validated and successfully submitted, we will display a Thank You message (together with the unique reference number assigned to this item) and acknowledge that once his/her form is processed and we will email him/her the membership number together with the Welcome package.
2. The record is inserted into some temporary table (e.g. TBL_APPLICANTS)
3. An email notification will be sent to the keeper of the Member Registration Group (the email of this group is defined in the database, it's configurable). The email would have the following info:
 - Subject: New Member - Reference #: 12345
 - Body: All information collected together with registration date/time
4. The keeper logs into the CRCTVN Admin app (to be created), bring up the list of membership applications, select the Reference 12345, correct any mistakes then "accept" the application. The Admin app would
 - Assign the next Membership ID to this applicant
 - Send an email notification to the applicant together with any Welcome Package. In the email, we should address the applicant by name and informing applicant of his/her membership ID.
 - Move the record into the permanent Membership table (e.g. TBL_MEMBERS), and delete the record from the temporary table.

Notes:

When displaying the list of members to the public, we will get records from the Membership table.

Agreeded Method:

User fill out first page (2 fields containing email for validation purpose) we validate if all ok
Display the next page, about our teams, which team does what, what expertise we need, ...
Once done, the record is inserted into the main member table.
A email notification will be sent to the admin as an FYI, admin does not have to review or approval. The email notification would have in its subject the "Reference No."
We will not give member any membership number for now.

3.2. News

This feature allows CRCTVN admin to post a news item to CRCTVN website.

3.2.1. Information Required

Currently each news item in our website has the following info:

- Date of posting
- Headline
- Highlight of the news
- Full Text Description

The following is an actual example

August 15, 2002

[CRCTVN Next 10 Months Roadmap.](#)

The road map of what CRCTVN will try to achieve in the next 10 months (before the CRCTVN Conference 2003).

3.2.2. Data Processing

1. The CRCTVN Admin logs into the CRCTVN Admin app (to be created), bring up the "Add News" page, then the page will display the GUI to get the following data:
 - Date
 - Headline
 - Highlight of the news
 - Name of the file contain the full content of the news item (preferably in PDF format) to be uploaded.
2. Upon submit, the Admin app would:
 - Assign the next News Reference ID to this news item.
 - Save all supplied info together with the Admin name into the News table (e.g. TBL_NEWS) in the database.
 - Send this news release to all members and supporters via CRCTVN list server (format and send an email with all info to two CRCTVN lists: members and supporters, the CRCTVN list server will take care of sending emails to all members of these two lists).

Notes:

When displaying the list of news items on the website, we will get records from the News table.

HTML format should be used for news text, no PDF.
And news is to be displayed in the NEWS section.

3.3. Guest Book

This feature allows CRCTVN website's visitors to sign the guest book with their comments.

3.3.1. Information Required

We need the following information:

- Date & time
- [Subject / Title] – Not sure if we need this or not!
- Comment (we should put a limit to the number of characters allowed, perhaps 1000 bytes)

3.3.2. Data Processing

1. We should have a "Preview" button allowing users to preview their formatted text before committing.
2. Once the form is validated and successfully submitted, we will refresh the guest book and bring the user back to the guest book GUI.
3. The record is inserted into the Guest Book table (e.g. TBL_GUESTBOOK)
4. An email notification will be sent to the keeper of the Guest Book (the email of this group is defined in the database, it's configurable) giving the keeper a chance to check the guest's comment to make sure it's context is not out of line. The email would have the following info:
 - Subject: New Guest - Reference #: 12345
 - Body: All information collected
5. If the keeper needs to edit or delete the guest's comment, he/she logs into the CRCTVN Admin app (to be created), bring up the list of guest book entries, select the Reference 12345, delete or edit the record.

3.4. Online Group Subscription

This feature allows visitors to subscribe / unsubscribe to CRCTVN's newsletter. One place where we will put the GUI to do this is at the Contact page, we might put this GUI at other places as well if necessary.

3.4.1. Information Required

Email Address
Subscribe / Unsubscribe

3.4.2. Data Processing

1. Once the form is validated (email address has valid format) and successfully submitted, we process according to the action chosen:

Subscribe

- Display a Thank You message and acknowledge that once his/her form is processed and we will email him/her the confirmation.
- Format a "Subscribe" email with proper information and email it to the CRCTVN List Server – this would subscribe the user with our list server engine.
- We should email the user the Welcome Package (Question for Thai: I wonder if this

can be done by the List Server?)

UnSubscribe

- Format an “Unsubscribe” email with proper information and send it to CRCTVN List Server – this would unsubscribe the user from our list server engine.

Notes:

On each news release we sent, in the bottom of each email, we should put the URL for them to go and unsubscribe from this newsletter.

3.5. List of Members

This feature allows us to display the list of members using data from the CRCTVN database.

3.5.1. Information Required

Currently each member item in our website has the following info:

- Membership Number
- Name
- Location (City, Province/State, Country)
- Flag to indicate photo is available or not

No.	Member Name	Location	Photo
1	Thanh Nguyen	Richmond, BC, Canada	NA

3.5.2. Data Processing

1. Format and display records from the Membership table (e.g. TBL_MEMBERS).
2. Make sure we obey the anonymous flag.

Notes:

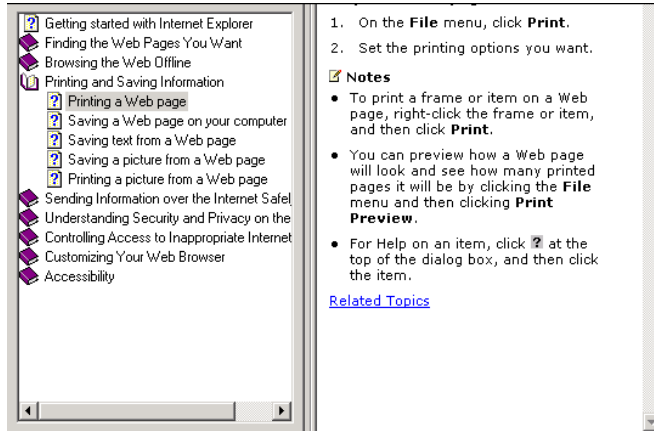
See feature “Online New Member Registration” for more info.
Photo is for future use – for now, just put “NA” in the Photo column.

3.6. Infrastructure and GUI to support the Health Care pilot project

This is a pilot project – Collecting Health Care Articles for the average person daily use

We hope that this pilot would give people a better and tangible idea of what Tri’ Viet project is about. In this pilot’s scope, we would like to enhance the CRCTVN website to allow

- End users to be able to search and view Health Care articles by keywords
- Helpers could submit articles (or links) in either English or Vietnamese of health care articles to CRCTVN
- CRCTVN administrator(s) to review edit and approve submissions to be published.
- End users to be able to navigate through the list of all collected Health Care articles (the GUI should have at least two frames: left and right; the left frame contains the table of content; the right frame contains the body of the currently selected document on the left frame. Similar to the drawing bellows:



With one different that is on the left frame, we will have three levels: Each “book” on level 1 represents a category of subject (e.g. Farming, Healthcare, Fishing, Home Improvement, etc...), each category contains a list of subjects - books on level 2 (e.g. Rice, Mango, Banana,..); and each subject matter contains a list of articles (e.g. Top 10 types of rices for the Mekong Delta, Best way to preserve seed; How to control insect with minimum pesticide, etc...) on level 3.

For the pilot project, we will have only one entry, “Healthcare” on level 1. However, we want the GUI to be done right, so we can easily add other categories later on.

Alternately, if the GUI is too difficult to implement (relative to our limited resource and timeframe), we could go for a GUI with a combo box and 2-level tree as follows:

- combo box allows user to select which category he/she interests in
- once the category is selected, the first level of the 2-level tree would contain list of subjects within the selected category, and the second level of the tree would contain the list of articles within the selected subject.

Using File Directories

One idea on how we can keep collection of knowledge articles which can make it easy for the GUI to display data organization and for the ColdFusion search engine to work is to use the disk directories to keep all articles. For examples

```

Some Root Dir
    Health Care Dir
        Eye Care Dir
            Article ABX.html
            Article XYZ.html
        Dental Care Dir
    Construction Dir
        Cement Dir
            Article 123.html
    Environment Dir
    Computer Dir
    
```

This directory approach gives us the following major benefits:

- Easy and simple to maintain (add/rename/delete) directories and articles
- The app can build up the GUI file-tree on the fly; hopefully there are already code snippets out there that we can use readily. In the worst case, if building the GUI tree like is too difficult for us, we can build the list of entries one level at a time. For example

Health Care > Eye Care → shows current path; the list box underneath can show all entries on this level.

Article ABX.html
Article XYZ.html

- ColdFusion can easily build the index recursively starting from the root directory.
- We don't need to use database to store these data.

3.6.1. Information Required

For Submitter of Health Care Article

- Title
- Synopsis of the article
- Body text (if applicable)
- Attachments (if applicable)
- Submitter Name and Contact Email – optional, we like to give credit to submitters. If we ever do that, we probably will only publish their names but not their emails.

End Users

- GUI to navigate through the list of all collected Health Care articles
- Search form allowing users to enter search keywords

3.6.2. Data Processing

For Submitter of Health Care Article

Once the form is validated and successfully submitted, we process as follows:

- Display a Thank you and acknowledgement message.
- We assign a reference number to this article
- Format all info collected into a record (which might contains references to external attachments) and insert it into a “New Article queue” (e.g. table TBL_ARTICLES with field ProcessingStage = New)
- Format an email notification message and send it to the keeper of the Content group (the email of this group is defined in the database, it's configurable) informing the keeper of a new submission. The email would have the following info:
Subject: New Article - Reference #: 12345
Body: All information collected including attachments

For Content Keepers

1. Once the Content keeper receives the email notification, he can log into the CRCTVN Admin application (to be created), bring up the list of New Articles, select the Reference 12345, the admin can select the proper category (e.g. SubjectCategory = Health Care) for this article, then “forward” (save the record with some indicator, e.g. ProcessingStage = Specialist) it to the proper group which is specialized and responsible for a subject matter. (FYI, in the future we will have more than the Healthcare group however we would like to build the infrastructure now to support more than the Healthcare group).
2. When the article is to be forwarded to a specialist group, the Admin app will create an email notification message with the following info
Subject: New Article - Reference #: 12345
Body: All information collected including attachments
and sends it to the specific subject matter's keeper (again the email of the subject matter's keeper is defined in the database, it's configurable).
3. Once the subject matter keeper receives the email notification, he can log into the CRCTVN

Admin application (to be created), bring up the list of New Articles, select the Reference 12345 to review and perform whatever necessary tasks to bring this article to publication.

At some point later, when this article is ready (cleaned up, reformatted, translated, etc.) to be made online the subject matter keeper will specify via the GUI that ProcessingStage = Done.

The engine would perform necessary steps to make this article available on-line, by

- Inserting a record with proper attributes (e.g. date time, submitter name, category, subject matter, title, link to article PDF file, etc...) into the master subject matter table (e.g. TBL_SUBJECT_MATTER).
- Move the PDF file into proper place.

Notes:

It would be nice if we can create an auto reminder feature which track articles which are being processed but not finished for a long period of time (i.e. most likely delinquent jobs). We can have some default configuration duration (in days) which dictates that if any job (article) stay in its state (ProcessingStage) other than Done over this duration then send email reminders to both Content and the specific subject matter's keeper.

4. Nice-To-Have Features

Items are not listed in any particular order and we don't have any specific timeline in implementing any of these features. They are noted and recorded here to indicate and remind us that we had thought about these items.

4.1. Mechanism For CRCTVN Admin to Show Important Announcements

We are looking for best place(s) to display important announcements (such as News Flashes temporarily being displayed on the CRCTVN home page). We make placeholders for these announcements then create a GUI for admin to change the text and links as necessary (through some admin app) – so they can manage these announcements themselves without bothering developers.

4.2. Similar Idea but for CRCTVN Members only

Perhaps we can find placeholder in the “Info For Team Members Only” page.

4.3. “Info For Team Members Only” Page

We want this section to be data driven similar to the new “News” page. Again, this Team Members Only page's owner can manage page content without bothering developers.

4.4. Bilingual Website (English and Vietnamese)

Using Unicode.