

ColdFusion Code Sample Breakdown:

Use case:

To maintain their medical licenses, doctors are required to accumulate a certain number of Continuing Medical Education (CME) points from an accredited institution.

So, for this 'Diagnosis Please' application, we post a difficult cases each month for doctors to solve.

Once posted, the case remains open for 3 months, then it is deactivated.

Doctors who provide correct answers during the 3-month window get awarded up to a total of 8.75 CME points for Fellows/Doctors, and 0.00 CME Points for Residents or Resident groups.

We get the cases every month from a medical journal API (PUBInfo) via CFHttp request which is set up as a scheduled task to run monthly.

[CallPUBInfoAPI.cfc](#) (Dependencies: jsoup-1.8.3.jar)

CFHttp is used to get the cases from PUBInfo web services, I then parse through the HTML response, using a 3rd party utility called [Jsoup](https://jsoup.org/) (https://jsoup.org/), harvest info I need, such as (Case Title, Case Number, Description, Publication dates, Issue, Article URL, Diagnosis / Answer, Images/figures) and insert into the **diagnosis please** database.

Methods:

- init: sets up all necessary local variables for this component.
- login: sends login credentials to PUBInfo server.
- getArticle: gets a specific article from PUBInfo server with given article id.
- search: searches for articles within a given set of constraints from PUBInfo API. This method demonstrates how to connect to a 3rd party API, and handle the response. Breakdown: I loop through the *search* results to get basic *publication information*, then I use *getArticle()* to get specific article information. Finally, still within the loop, I apply **JSoup Parser** to the results from *getArticle()* and harvest the information I need into the database using pre-built store procedures.

[GrantCME.cfc](#)

This CFC grants CME credits to doctors who submitted correct answers to the cases published.

Methods:

- init: *This is to demonstrate how other cfc's can be called into this cfc simulating inheritance similar to a OOP coding style.*
- cme_credit: This is to demonstrate using loops with CFscript and how I can account for different business rules.
- sendCMEEEmail: This is to demonstrate sending emails using CFscript.

All other CFCs are related to and written by JSOUP!!!!!!