The Nudge Machine

The Nudge Machine is a behavioral insight platform for coaches and coachees. It provides an instrumentation and measurement framework for behavioral interventions enabling coachees to track progress and coaches to tailor instruction. Using The Nudge Machine, coachees can set and track goals while the coach can reach out and support their coachees whether it be it inside the classroom or in the context of their daily lives. The tool is device independent and can be used on a mobile or desktop browser. It's a virtual coach-in-your-pocket.

Getting Started Guide

A getting started guide specific to coaches is covered in this documentation. The minimum you need to do to get started is to complete a once-off enrolment process. You can then monitor the performance of your coachees, send nudges and survey and spot poll requests. Refer also to the coachee getting started guide for coachee specific functions and/or capabilities common to both roles.

Home Menu

This is the home page which you can reach by entering http://**DOMAIN** in your browser. The value of **DOMAIN** is described below.

There are three main sections to this application, a Home Menu, a Settings Menu and a Help Menu.

To access the Help Menu click the info icon located at the left of the page header.   To access the Settings Menu click the gear icon located at the right of the page header.

DOMAIN can take the values of: www.thenudgemachine.com or www.satimetry.com

Coachees or coaches on the POGO-8056 course must use www.thenudgemachine.com

The www.satimetry.com site is a demonstration site for all other users.
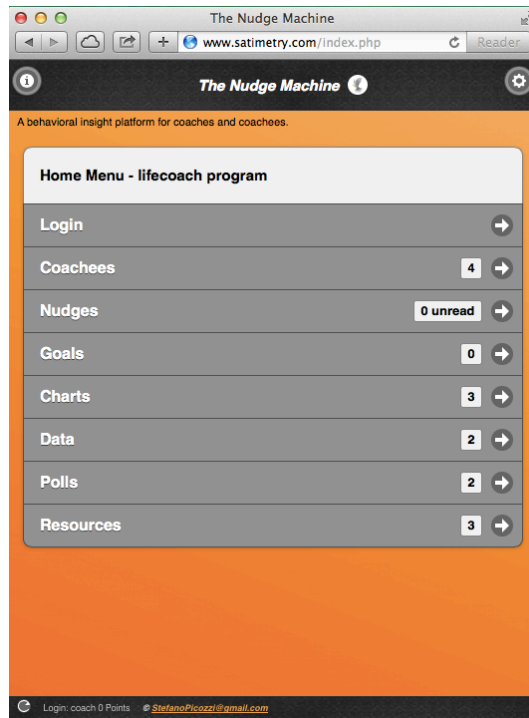
Settings Menu

You can reach the Settings Menu by clicking the gear icon on the Home Menu or by entering http://**DOMAIN**/settings.php in your browser.

You must be enrolled as a Coach in your program in order to access Coach functions such as rule assignment.

Program creation and coach enrollment is via a manual process by the Administrator.

Once enrolled in your program you login using your coach username and password.

The demonstration system defaults to and uses a prebuilt program known as "The Coach in Your Pocket"

stefano.picozzi@anu.edu.au
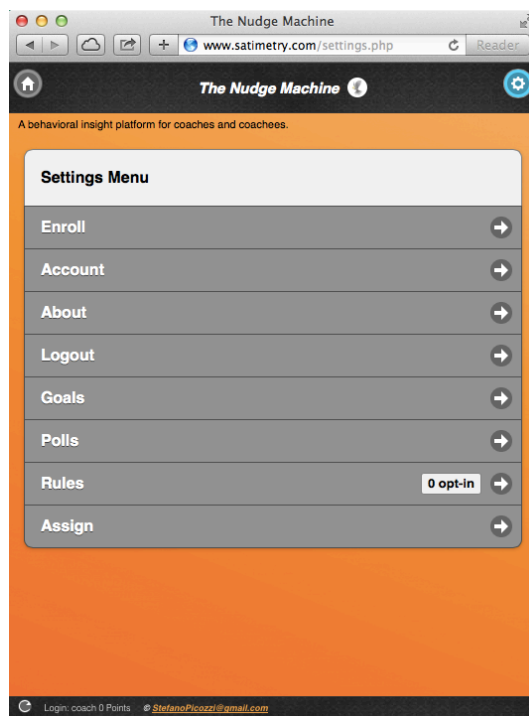
Coachees

The Coachee sub-menu within the Home Menu will present a list of coachees enrolled in this program.
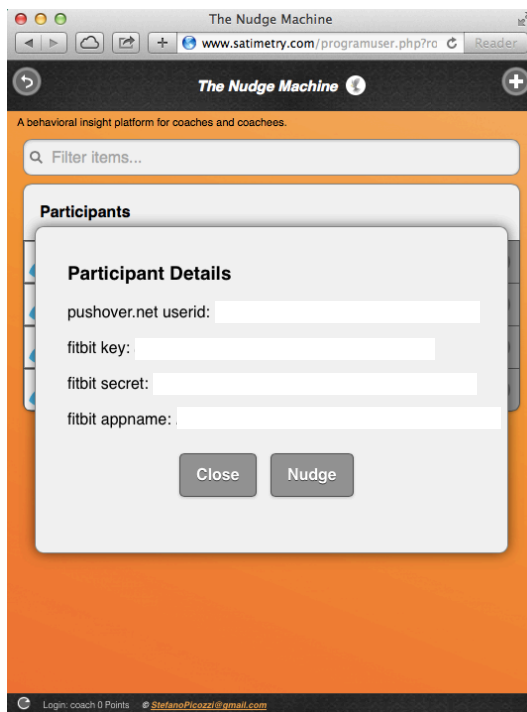
The Coach can send a manually configured ad-hoc nudge either to all or a specific coachee.
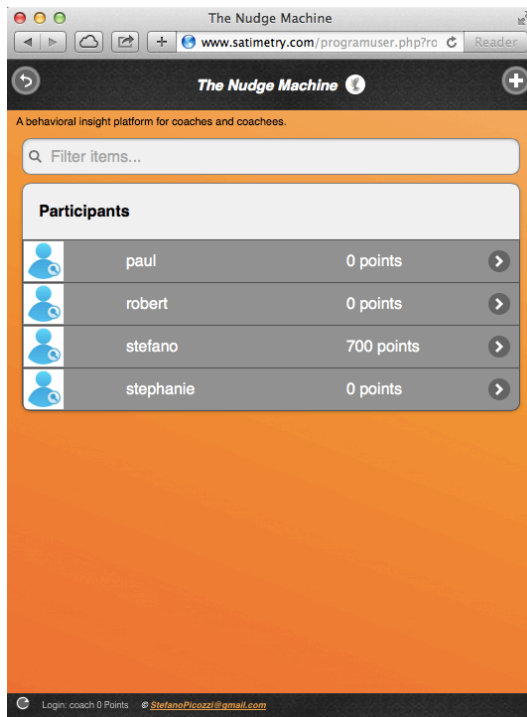
Nudge Send

To send an individual nudge, click the targeted coachee and then click the Nudge button. This is described in the next screen shot.

To send a nudge to all participants, click the plus icon in the right hand side of the page header.
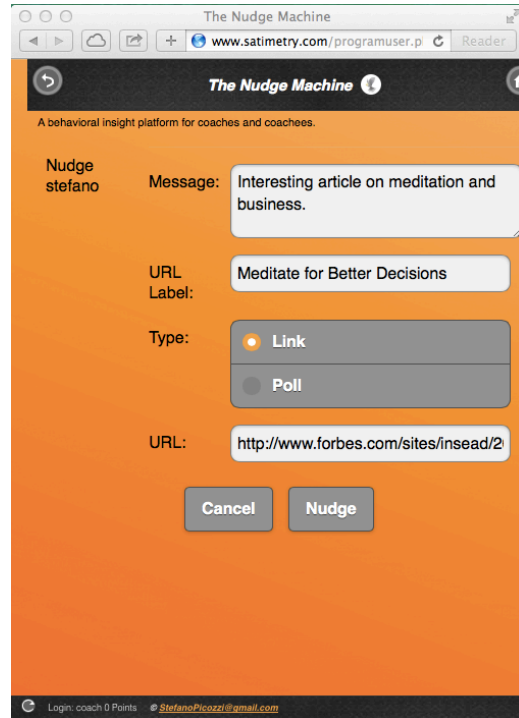
Nudge Coachee

You will then be presented with the Nudge Form. In the example to the right, the nudge consists of a message to inspect some content as located at the site specified by the URL.

The URL Label: field can be any short text. The URL: field should be the fully specified URL, as you would enter in a Browser. Leave the Type: field as the default value, i.e. Link.

Note that the URL Label and URL are optional. If you just want to send a message, just enter the Message text and then click Nudge.

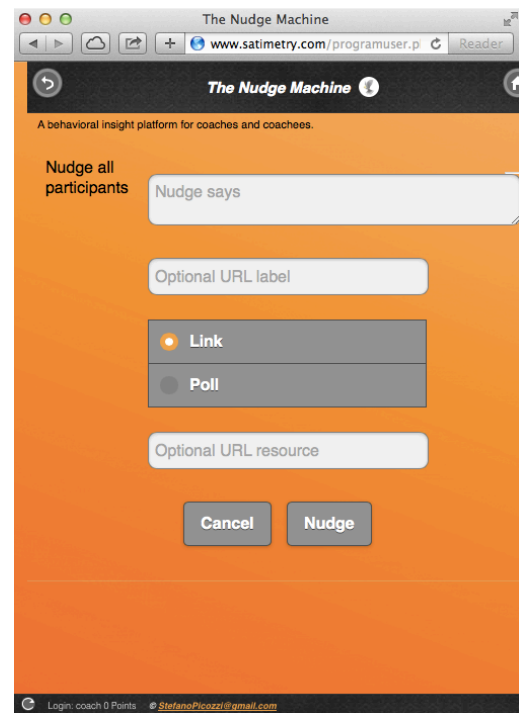When the coachee logins into the application, he will be presented with a nudge that he can then inspect.

Nudge All Coachees

If you pressed the plus icon to nudge all coachees, you will be presented with this Nudge Form.

Proceed as per the individual coachee. In this case all coachees will get a nudge when they revisit the application.
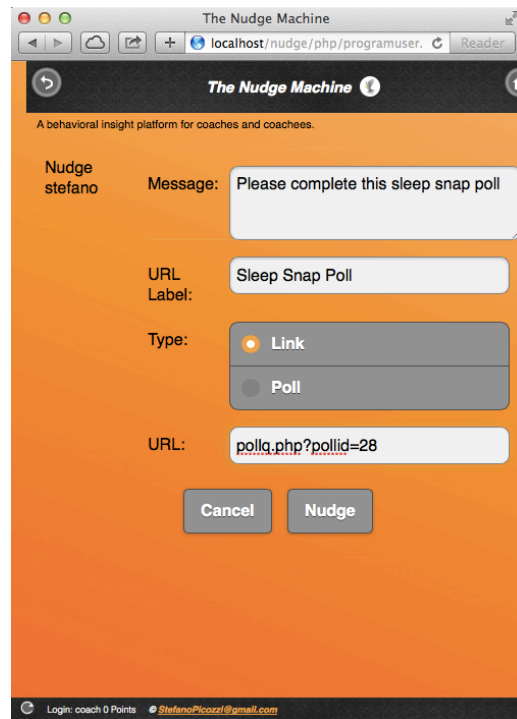
stefano.picozzi@anu.edu.au

Snap Poll

As well as nudging a coachee by pointing him to relevant content, you can also nudge them to complete a snap poll.

The application support various Polls, refer to the Polls section in this Guide for details.

To nudge all or a specific coachee to complete a poll, complete the Form as per the example to the right.

The string to enter in the URL: field is obtained by referring to the poll list available from the Poll sub-menu under the Settings Menu.

Nudge

The Nudge sub-menu under the Home Menu is where nudges for all coachees can be inspected.

Nudges can be manually created as per the documentation described in the Coachee heading previously or system generated by a daily batch process.

System generated nudges are created using rule based expressions that test temporarily constrained behavioral queries against the coachees observations. For example, "tell me how many times in the last 14 days the coachees attained better than expected for his goal".

System generated nudges are configured by the Administrator. A short description of this appears in the Queries section of this documentation.
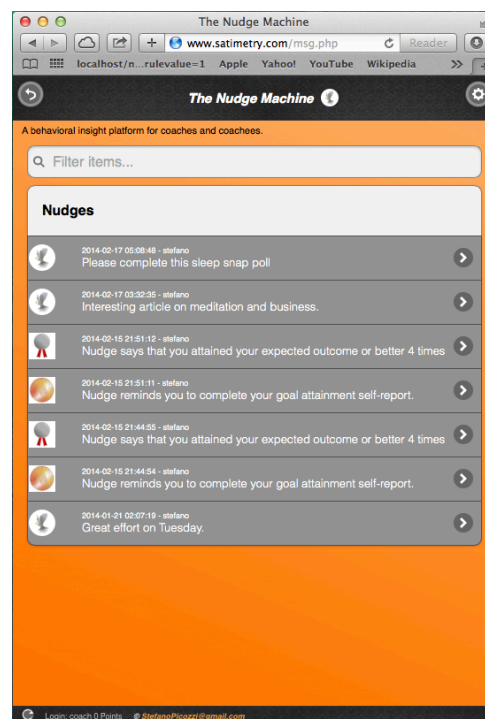
Links

The Links sub-menu under the Resource sub-menu in the Home Menu is where useful external content pointers are located.

Coaches can add new content to the Link sub-menu. To do this click the plus icon on the right side of the page header.
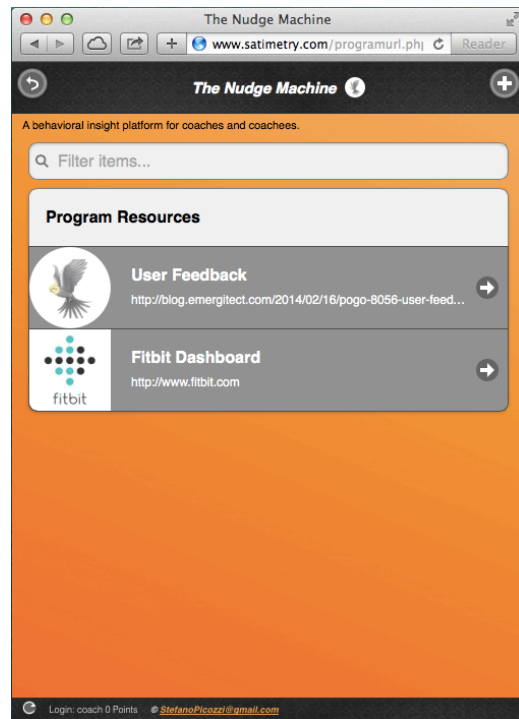
Link Add

To add a new Link resource to appear in the Link sub-menu, complete the Link Add Form as per the example to the right.

Leave the URL icon: as the default value of html.

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Polls

The application supports both external polls and also has an inbuilt facility for small simple likert scale polls.

Polls are added to the program via a manual Administrator initiated process.
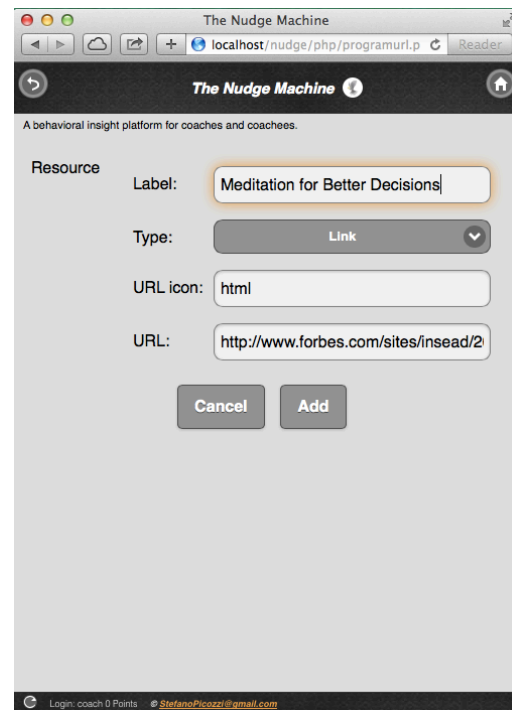
Coaches can inspect available poll from the Polls sub-menu located in the Settings Menu.

Internal polls have URLs such as "pollq.php .." while external polls being with "http:// ..."
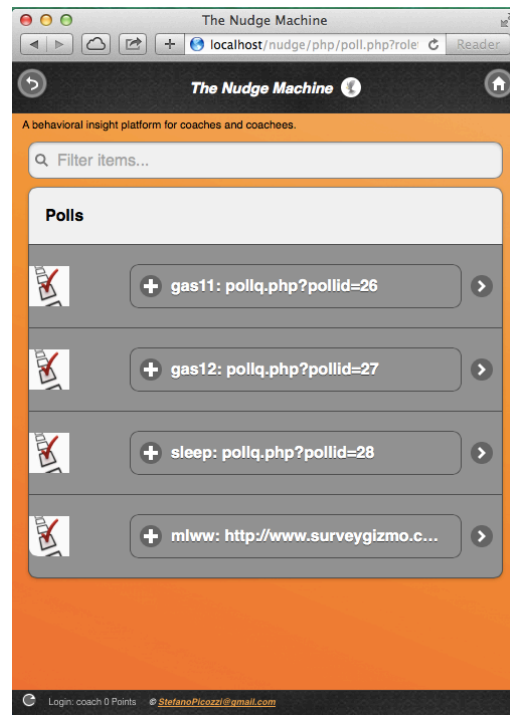
Poll Review

When you click the r-arrow on the poll list view a popup will appear asking if you wish to review this specific poll. By clicking Review you will then be able to inspect the Poll.

For example, this is the contents of an internally built poll for a single item sleep quality measure.

Rule Assignment

While rule creation is an Administrator function, once created the Coach can choose to assign rules to the program.
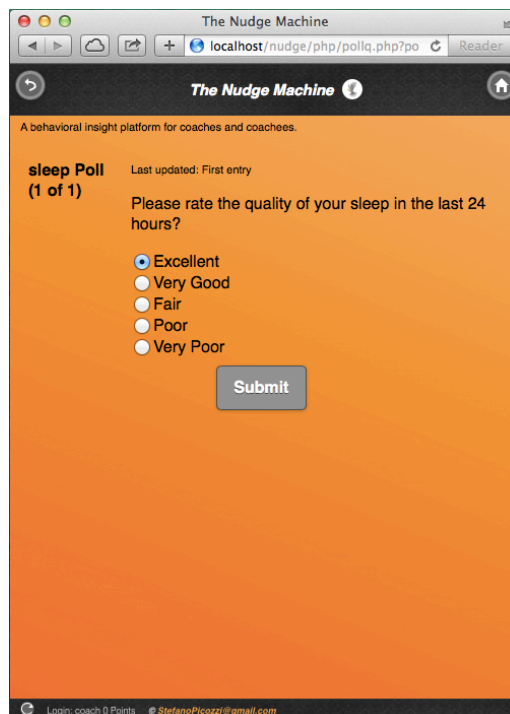
The Assignment function is located in the Assign sub-menu in the Settings Menu.

Unassigned rules will appear in the list view after you select the Assign sub-menu.

To assign a rule place, highlight the targeted rule. You can optionally use the slider to award a point score for the rule. Points are used for gamification features that will be introduced in later releases.
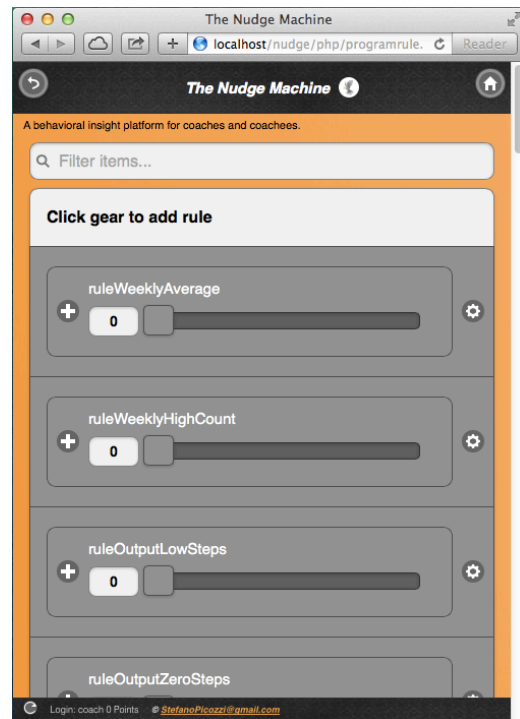
Assignment Configuration

Click the gear icon to assign the rule. A popup will appear then press Add.

Queries

The snippet to the right shows two queries. The first creates a nudge (every Sunday) that reports how many times the coachee reported expect or better results in the last 14 days. The second creates a daily nudge to remind the coachee to complete a daily survey to e.g. self-report the goals.
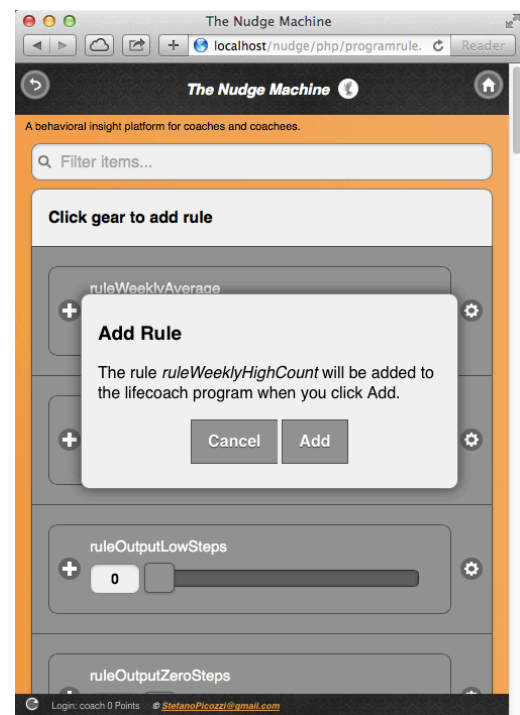
These rules are inputs into an events-based rules engine which reasons over the coachees's behavioral data, e.g. goal attainment, by testing against these rules.

A detailed coverage of behavioral queries is beyond the scope of this document. In the current release, queries are implemented by the Administrator.

Future releases will include support for a domain specific language that will enable coaches to form their own queries.

```
dogas.drl

rule "ruleExpectedCount"
  salience -100
  no-loop true
  when
    $participant : Participant( dayofweek == "Sun" )
    $obsCountTotal : Number( intValue > 0) from accumulate(
      Observation( $obsCount : obsvalue >= 0, $participant.id == id ) over
window:time( 14d ),
      count( $obsCount ) )
  then
    Date today = new Date();
    outSDF = new SimpleDateFormat("E dd MMM yyyy");
    JSONObject joutput = new JSONObject();
    joutput.put("id", $participant.getId());
    joutput.put("rulename", drools.getRule().getName());
    joutput.put("ruledate", today);
    joutput.put("rulemsg", "Nudge says that you attained your expected outcome or
better " + $obsCountTotal + " times in the past 14 days.");
      joutput.put("ruledata", "http://www.satimetry.com/msg.php");
    Output $output = new Output(joutput.toString());
    insert($output);
      print(drools.getRule().getName() + "->" + $participant.getId() + " - " +
$participant.getDayofweek() );
end

rule "ruleDailySurveyReminder"
  salience -300
      when
    $participant : Participant()
      then
    Date today = new Date();
    outSDF = new SimpleDateFormat("E dd MMM yyyy");
    JSONObject joutput = new JSONObject();
    joutput.put("id", $participant.getId());
    joutput.put("rulename", drools.getRule().getName());
    joutput.put("ruledate", today);
    joutput.put("rulemsg", "Nudge reminds you to complete your goal attainment self-
report.");
              joutput.put("ruledata", "http://www.satimetry.com/gasq.php?
ruleid=44");
    Output $output = new Output(joutput.toString());
    insert($output);
    print(drools.getRule().getName() + "->" + $participant.getId() );
end
```