Student Software Engineering Project: Web-SynDic

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## Web-SynDic

# Web System for Demonstrating the Syntactic Algorithms for Solving Linear Equations in Nonnegative Integers

(Nonnegative Linear Diophantine Equations)

TEST EXECUTION DOCUMENT Iteration 2.0 (started August 2004)

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### 1 Management

Data	Tester(s)	Number	Found errors	Fixed errors
		of tests		
11.08.2004	Ananin A.	9	1. Wrong saving of user	None of errors fixed.
			profile in Data store	
			(User information).	
12.08.2004	Ananin A.,	22	1. Wrong saving of user	Wrong saving of user
	Kryshen M.		limits (Administrator)	profile, wring saving of
				user limits.

#### 2 Web-server

ı	Data	Tester(s)	Number	Found errors	Fixed errors
			of tests		
	11.08.2004	Ananin A.	5	1. Wrong encryption.	Wrong encryption was
					fixed.

## 3 Alpha testing

The List of Bug-Fixes and Improvements to Do. (- not fixed, + fixed, \* added to the future development)

- +001 Add a link to the process page from the report page  $(\operatorname{Mr.} \operatorname{Kryshen})$ .
- \*002 Describe the browser compatibility issues in the user manual (Mr. Salo).
- \*003 Add a possibility to reset algorithms configuration to default values (controlled by Mr. Kryshen, added to the future development requirements).
- +004 Correct the "Dear user" phrase in the index page (Mr. Salo).
- +005 Change the algorithms names to start with upper-case letters (Mr. Kulakov).
- +006 Fix the "empty report table" bug (Mr. Kryshen).

- +007 Stop solving set of ANLDE systems after the first error (Mr. Kulakov).
- \*008 Describe parallel algorithms execution for future development (Mr. Kulakov).
- \*009 Describe basis solution generation and possibility to generate

  NxN systems for generators future development (Mr. Kulakov).
- +010 Apply time limit to the whole set of systems (Mr. Kulakov).
- +011 Change the number of systems in a set to 20 (Mr. Kryshen).
- +012 Display the time task waited in spooler (controlled by Mr. Kulakov).
- +013 Fix the timeout problem when loading the report page (Mr. Kryshen).
- +014 Add notification page for generation (controlled by Mr. Kryshen).
- +015 Correct the "number of equations is greater than number of unknowns" error message (Mr. Kulakov).
- +016 Display more detailed error message when generator fails to generate system with the specified parameters (Mr. Kulakov).
- +017 Change the result text for the algorithm failure to "Internal solver error or memory limit exceeded" (Mr. Kulakov).
- +018 Add 0.005 sec. to the statistics when system time is less than 0.01 sec. (Mr. Kulakov).
- +019 Fix the internal error caused by direct request to the processet servlet (Mr. Kryshen) (obsolete).
- +020 Fix the "several process requests in a single session" bug (Mr. Kryshen).
- +021 Fix the "simultaneously profile deletion" bug (Mr. Kryshen).

(the fix was not tested)

- +022 Change the HTTP status code for BadRequestException (user error) (Mr. Kryshen).
- +023 Fix the "generator parameters reset on error" bug in process forms (Mr. Kryshen).
- +024 Fix the "solvers do not work for admin" bug (Mr. Kulakov).
- +025 Correct the server load text (Mr. Salo).
- +026 Correct the terminology in the report pages (Mr. Kulakov).
- \*027 Add tips for abbreviations and terms (Mr Salo, added to the future development requirements).
- +028 Write ANLDE examples page (Mr. Ananin).
- +029 (2004-09-07) When generator calls ANLDE.error() method the previous ANLDE system was lost (controlled by Mr. Kulakov, fixed Mr. Kryshen).
- +030 (2004-10-07) Generating process have big resource usage. Change generators to use less CPU time (Mr. Kulakov).
- +031 (2004-10-07) If cookies are disabled in browser, one of two parallel requests for generation from the different admin sessions fails with the user being logged out (Mr. Kryshen).
- +032 (2004-10-13) Incorrect process state displayed in the notification page when user requested process or processet page while there is an ANLDE system already in processing (Mr. Kryshen).
- +033 (2004-10-13) ANLDE system set processing blocks when user reloads process set page returned after generator failure (Mr.Kryshen, Mr. Kulakov).
- +034 (2004-10-13) ANLDESystemSetParser does not check for null

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constraints (Mr. Kryshen).

- +035 (2004-10-13) "ANLDE System is already in processing" error appears when user reloads the notification page at the "waiting in queue for solving" stage (Mr. Kryshen).
- +036 (2004-10-13) No error is reported when note sending fails (controlled by Mr. Kryshen, fixed by Mr. Salo).
- +037 (2004-10-13) Note sending does not work under Tomcat 5 (controlled by Mr. Kryshen).
- +038 (2004-10-16) New OS Linux supports more precise values for resource usage (Mr. Kulakov).
- +039 (2004-10-23) For solving a set minimal system time never less than 0.01 sec (Mr. Kulakov).
- +040 (2004-10-31) Notification page is not valid HTML 4.01 because of unquoted '&' in URL's (Mr. Kryshen).

#### Alpha Testing 2004-11-01

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- +041 "Session olready invalidated" error (fix Mr. Salo).
- +042 Wrong links in Web-SynDic pages (fix Mr. Kryshen).
- \*043 Use button "back" when process not completed yet (add to FAQ Mr. Salo).
- +044 The processing of the ANLDE system (set) may be stopped between generation and solving phases because solver spooler is full (add to man and FAQ Mr. Kulakov).
- -045 Need to decrease time constraints and default values (fix Mr. Kryshen).
- +046 Undisclosed minimal values for constraints (fix Mr. Kryshen).
- +047 Reassert "Agree with solution" for report a set of ANLDE systems

- (fix Mr. Ananin).
- +048 User can add commands (e.g. javasript) in form fields (fix Mr. Kryshen).
- \*049 Sometimes generators are not finished and sleep. (control Mr. Kulakov, added to the future development)