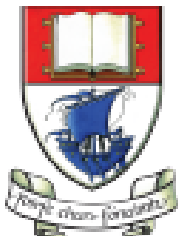


Assignment 1

Produced
by:

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Assignment structure

- **100% CA (2 Assignments)**
 - **Assignment 1 (40%)** – due Sunday, 4th November @ 5PM (hard deadline).
 - No presentation required, but you may be asked to do a code walkthrough.
 - **Assignment 2 (60%)** – due Wed, 2nd January @ 9AM (hard deadline).
 - Specified in week 8 (just after midterm).
 - Presentation in early January required; a PPT template will be provided.

Pacemaker V1

- Design and implement a simple Activity Tracker console (CLI) application.
- The application is to manage activities for multiple user accounts, enabling activities to be created, read, updated and deleted (CRUD).
- The application is to persist the user and activity data to a single file. Two file formats are to be supported:
 - XML
 - JSON
- Labs will proceed to build approx. 50% of the specification...your job is to complete the other 50%.
- Partial solutions (unimplemented commands or partially implemented commands) are acceptable.

Command Set

```
Welcome to pacemaker-console - ?help for instructions
pm> ?la
abbrev name          params
lu      list-users   ()
cu      create-user  (first name, last name, email, password)
lu      list-user    (email)
lius    list-user    (id)
la      list-activities (userid, sortBy: type, location, distance, date, duration)
la      list-activities (user id)
du      delete-user  (id)
aa      add-activity  (user-id, type, location, distance, datetime, duration)
al      add-location  (activity-id, latitude, longitude)
cff     change-file-format (file format: xml, json)
l       load          ()
s       store         ()
pm>
```

cu - Create User

```
pm> cu homer simpson homer@simpson.com secret
```

```
ok
```

+	-----	+	-----	+	-----	+	-----	+	-----	+
	ID		FIRSTNAME		LASTNAME		EMAIL		PASSWORD	
+	-----	+	-----	+	-----	+	-----	+	-----	+
	1		homer		simpson		<u>homer@simpson.com</u>		secret	
+	-----	+	-----	+	-----	+	-----	+	-----	+

```
pm>
```

```
Welcome to pacemaker-console - ?help for instructions
```

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

aa - Add an Activity for a user

la - List details of an activity

```
pm> aa 1 walk fridge .001 "12:10:2013 9:00:00" 1:00:00
```

```
ok
```

```
pm> la 1
```

```
ok
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
1	walk	fridge	0.001	2013-10-12T09:00:00.000+01:00	PT3600S	[]

```
pm>
```

Welcome to pacemaker-console - ?help for instructions

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

al - Append Location data to an activity

```
pm> al 1 23.3 32.3
ok
pm> al 1 23.3 32.5
ok
pm> al 1 23.3 32.6
ok
pm> la 1
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
1	walk	fridge	0.001	2013-10-12T09:00:00.000+01:00	PT3600S	[23.3,32.3, 23.3,32.5]

```
pm>
```

```
Welcome to pacemaker-console - ?help for instructions
pm> ?la
abbrev  name                params
lu      list-users          ()
cu      create-user        (first name, last name, email, password)
lu      list-user          (email)
lius    list-user          (id)
la      list-activities    (userid, sortBy: type, location, distance, date, duration)
la      list-activities    (user id)
du      delete-user        (id)
aa      add-activity       (user-id, type, location, distance, datetime, duration)
al      add-location       (activity-id, latitude, longitude)
cff     change-file-format (file format: xml, json)
l       load               ()
s       store              ()
pm>
```

lu - List all Users

```
pm> lu
```

```
ok
```

ID	FIRSTNAME	LASTNAME	EMAIL	PASSWORD
1	marge	simpson	marge@simpson.com	secret
2	lisa	simpson	lisa@simpson.com	secret
3	bart	simpson	bart@simpson.com	secret
4	maggie	simpson	maggie@simpson.com	secret

```
pm>
```

```
Welcome to pacemaker-console - ?help for instructions
```

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```


lu - List user based in email

```
pm> lu marge@simpson.com
```

```
ok
```

ID	FIRSTNAME	LASTNAME	EMAIL	PASSWORD
1	marge	simpson	<u>marge@simpson.com</u>	secret

```
pm>
```

```
Welcome to pacemaker-console - ?help for instructions
```

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

lius - list user based on id

```
pm> lius 1
```

```
ok
```

ID	FIRSTNAME	LASTNAME	EMAIL	PASSWORD	
1	marge	simpson	marge@simpson.com	secret	

```
pm>
```

```
Welcome to pacemaker-console - ?help for instructions
```

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

du - delete user

```
pm> du 2
```

```
ok
```

```
pm> lu
```

```
ok
```

ID	FIRSTNAME	LASTNAME	EMAIL	PASSWORD
1	marge	simpson	marge@simpson.com	secret
3	bart	simpson	bart@simpson.com	secret
4	maggie	simpson	maggie@simpson.com	secret

```
pm>
```

Welcome to pacemaker-console - ?help for instructions

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

la - list activity sorted by different fields

```
pm> la 1
```

```
ok
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
1	walk	fridge	0.001	2013-05-12T09:30:00.000+01:00	PT10S	[23.3,33.3, 34.4,45.2, 25.3,34.3, 44.4,23.3]
2	walk	bar	1	2013-05-17T10:30:00.000+01:00	PT30S	[]
3	run	work	2.2	2013-06-10T11:00:00.000+01:00	PT50S	[]

```
pm> la 1 type
```

```
ok
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
3	run	work	2.2	2013-06-10T11:00:00.000+01:00	PT50S	[]
1	walk	fridge	0.001	2013-05-12T09:30:00.000+01:00	PT10S	[23.3,33.3, 34.4,45.2, 25.3,34.3, 44.4,23.3]
2	walk	bar	1	2013-05-17T10:30:00.000+01:00	PT30S	[]

```
pm> la 1 distance
```

```
ok
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
1	walk	fridge	0.001	2013-05-12T09:30:00.000+01:00	PT10S	[23.3,33.3, 34.4,45.2, 25.3,34.3, 44.4,23.3]
2	walk	bar	1	2013-05-17T10:30:00.000+01:00	PT30S	[]
3	run	work	2.2	2013-06-10T11:00:00.000+01:00	PT50S	[]

```
pm> la 1 duration
```

```
ok
```

ID	TYPE	LOCATION	DISTANCE	STARTTIME	DURATION	ROUTE
1	walk	fridge	0.001	2013-05-12T09:30:00.000+01:00	PT10S	[23.3,33.3, 34.4,45.2, 25.3,34.3, 44.4,23.3]
2	walk	bar	1	2013-05-17T10:30:00.000+01:00	PT30S	[]
3	run	work	2.2	2013-06-10T11:00:00.000+01:00	PT50S	[]

cff - change file format (json or xml)

load - read from persistent store (all users + activities)

store - write to persistent store (all users + activities)

```
pm> cff json
```

```
pm> load
```

```
..
```

```
..
```

```
pm> store
```

```
pm> cff xml
```

```
..
```

```
..
```

```
pm> store
```

```
Welcome to pacemaker-console - ?help for instructions
```

```
pm> ?la
```

abbrev	name	params
lu	list-users	()
cu	create-user	(first name, last name, email, password)
lu	list-user	(email)
lius	list-user	(id)
la	list-activities	(userid, sortBy: type, location, distance, date, duration)
la	list-activities	(user id)
du	delete-user	(id)
aa	add-activity	(user-id, type, location, distance, datetime, duration)
al	add-location	(activity-id, latitude, longitude)
cff	change-file-format	(file format: xml, json)
l	load	()
s	store	()

```
pm>
```

Unimplemented Commands

```
Welcome to pacemaker-console - ?help for instructions
pm> ?la
abbrev name          params
lu      list-users   ()
cu      create-user  (first name, last name, email, password)
lu      list-user     (email)
lius    list-user     (id)
la      list-activities (userid, sortBy: type, location, distance, date, duration)
la      list-activities (user id)
du      delete-user   (id)
aa      add-activity  (user-id, type, location, distance, datetime, duration)
al      add-location  (activity-id, latitude, longitude)
cff     change-file-format (file format: xml, json)
l       load          ()
s       store          ()
pm>
```

lius, la (sort by), la, du, cff, l, s

Assignment Rubric for Assignment 1

Standard	Core Features [30%]	Presentation [20%]	Tests [30%]	Build Systems [20%]
Baseline	Users/Activities/Locations (lius, la, du)	Plain	basic API tests	none
Good	Start DateTime (la sortBy:) Persistence - XML (l, s)	Pretty	full API tests	maven (build)
Excellent	Persistence -JSON (cff)	Tabular	UI Tests	maven (test)
Outstanding	Persistence - YAML OR Extra Reports	Enhanced	accurate coverage report submitted	maven (modular approach)

Assignment submission



Assignment 1 Dropbox (40%)

Zip your project and submit it via the assignment dropbox in Moodle by the specified date.

Include a README file that will give a very brief summary of your submission. It should include a very brief description of your:

- persistence approach.
- presentation approach.
- testing approach.
- build system approach.

In this file, identify all components/plugins used in the assignment.



Any questions?