ΣΧΕΔΙΑΣΜΟΣ ΚΑΙ ΑΝΑΠΤΥΞΗ ΕΦΑΡΜΟΓΩΝ ΚΙΝΗΤΟΥ ΥΠΟΛΟΓΙΣΜΟΥ

Τα εργαλεία που χρησιμοποιήθηκαν είναι ο Tomcat για Servlet Container/Web Server, το MySQL για βάση δεδομένων και το Eclipse για IDE. Για γρηγορότερη εγκατάσταση σε Windows και Mac προτείνεται τα εργαλεία να εγκατασταθούν μέσω των Chocolatey και Homebrew αντίστοιχα.

To back-end γράφτηκε σε Java, για το REST API χρησιμοποιήσαμε το Jersey και για ORM χρησιμοποιήσαμε το Hibernate. Για ευκολότερη εγκατάσταση δίνεται ολόκληρο το project του Eclipse, τα dependencies θα κατέβουν αυτόματα μέσω του Maven.

To front-end γράφτηκε σε HTML/CSS/JS και το βασικό framework που χρησιμοποιήθηκε είναι το Bootstrap. Οι web τεχνολογίες είναι ότι κοντινότερο έχουμε σε κάτι πραγματικά Cross Platform και λόγω του Bootstrap ολόκληρο το project τρέχει εξίσου καλά σε όλες τις συσκευές.

Προτού φορτώσουμε το project στο Eclipse, το MySQL service πρέπει να τρέχει στο port 3306, πρέπει να έχει βάση δεδομένων με όνομα db (η εντολή είναι: create database db) και ο χρήστης root πρέπει να έχει κωδικό 1234.

Οι πίνακες μπορούν να δημιουργηθούν με τα παρακάτω queries:

```
create table vote
    id int primary key auto_increment,
    username varchar(50),
    report_id int,
    vote varchar(1)
);
create table report
    report_id int primary key auto_increment,
    username varchar(50),
    title varchar(50),
    text varchar(500),
    type varchar(50),
    lat double,
    lon double,
    upvotes int not null check (upvotes >= 0),
    downvotes int not null check (downvotes >= 0),
    time varchar(50),
    path varchar(50)
);
create table user
    user_id int primary key not null auto_increment,
    username varchar(50),
    password varchar(50),
    type varchar(50)
```

Φορτώνοντας το project στο Eclipse, επιλέγουμε να το τρέξουμε σε server και δίνουμε το path του Tomcat. Το Eclipse θα εκκινήσει τον Tomcat και το index HTML θα φορτώσει στον ενσωματωμένο Web Browser. Προτείνεται η σελίδα να φορτωθεί σε Web Browser όπως το Firefox και το Chrome.

Αποτελέσματα της αξιολόγησης:

SUS Calculat	tion														
				Block 1				Block 2				Block 3			
Participant	Φύλο	Ηλικία	Επάγγελμα	Report 1	Report 2	Report 3	Report 4	Report 5	Report 6	Report 7	Report 8	Report 9	Report 10 F	Report 11 Re	eport 12
1	Α	30	ήτης Καταστ	82	85	79	77	80	75	69	7.	3 70	75	83	86
2	Γ	19	Φοιτήτρια	90	75	80	83	92	? 76	88	7	78	69	79	76
3	Α	25	Υπάλληλος	93	85	89	85	76	78	91	8	4 81	98	93	72
4	Α	21	Φοιτητής	76	80	72	90	95	69	78	8	7 82	. 79	74	78
5	Α	28	Σερβιτόρος	108	95	98	84	90	74	76	8	1 77	78	82	89
				Block 1	Block 2	Block 3									
			Average	106.625	100.6875	99.9375									
			STDEV	66.90998	62.71153	62.1812									

Ο χρόνος που έκανε ο κάθε χρήστης να στείλει την αναφορά μειώθηκε λίγο, γιατί αν και κατάλαβε πως να χρησιμοποιήσει την πλατφόρμα ο χρόνος που γραφεί είναι ο ίδιος.

Αποτελέσματα του ερωτηματολόγιου SUS για κάθε χρήστη:

artic	ipant ID:1_ Site:				Date: _	
	System	Usability	Scale			
	structions: For each of the followin ur reactions to the website today.	g statement	s, mark <u>o</u>	ne box tha	t best des	scribes
	•	Strongly Disagree				Strongly Agree
1.	I think that I would like to use this website frequently.					
2.	I found this website unnecessarily complex.					
3.	I thought this website was easy to use.					
4.	I think that I would need assistance to be able to use this website.					
5.	I found the various functions in this website were well integrated.					
6.	I thought there was too much inconsistency in this website.					
7.	I would imagine that most people would learn to use this website very quickly.					
8.	I found this website very cumbersome/awkward to use.					
9.	I felt very confident using this website.					
10.	I needed to learn a lot of things before I could get going with this website.					

	System U	Jsability	Scale			
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