



上海交通大学

SHANGHAI JIAO TONG UNIVERSITY



1896

1920

1987

2006

Mobile Internet project report

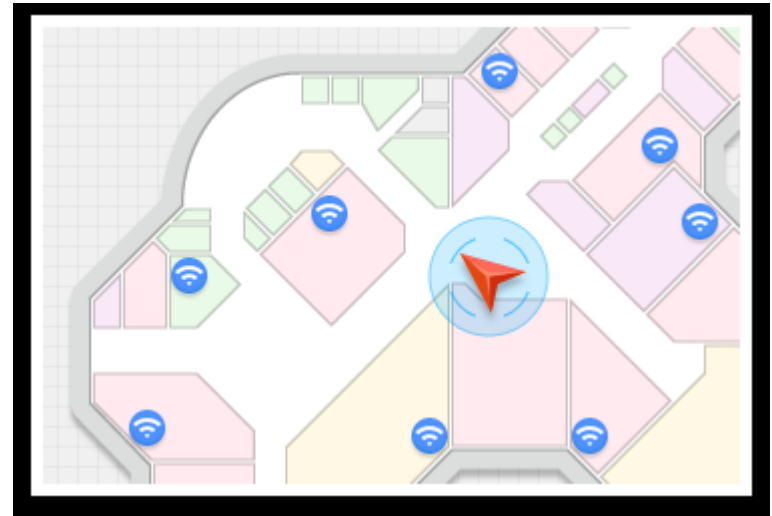
5140309481
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background

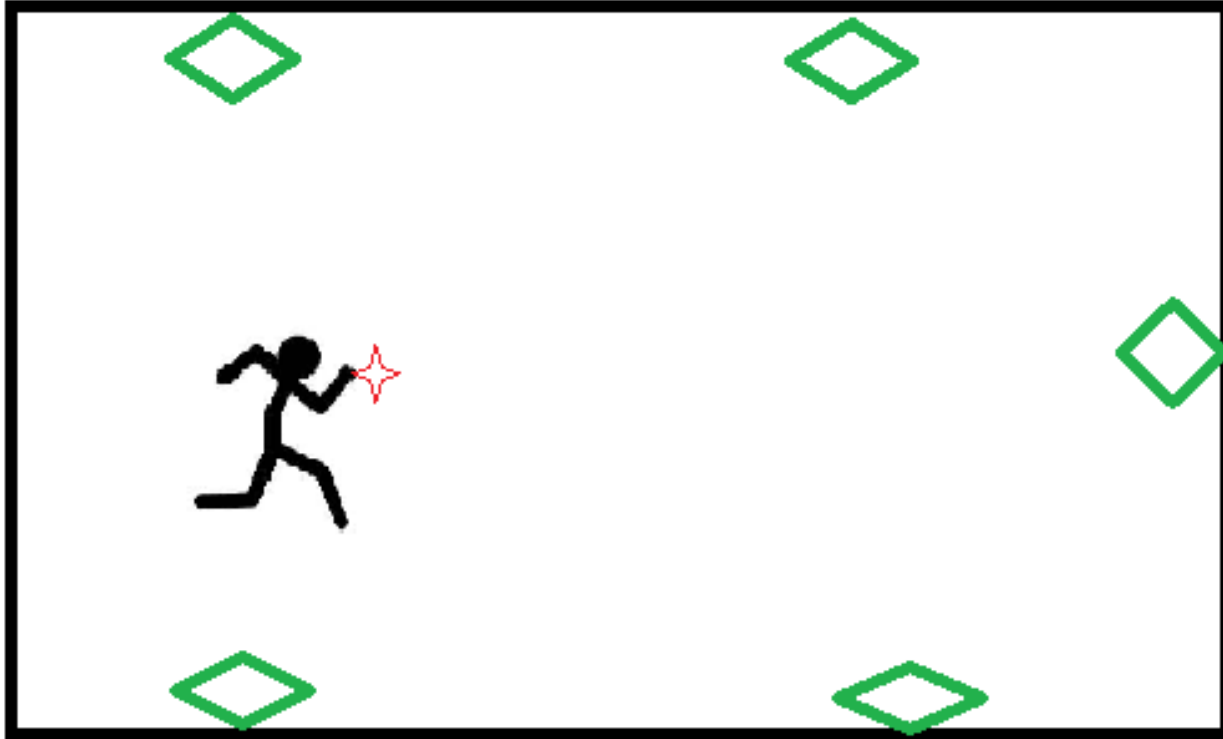
keywords:

- **accurate, reliable and real-time**
- **mobile device**
- **position-based services such as navigating, tracking or monitoring, etc**
- **In hospitals(expensive equipments), school, museums**





The architecture of server



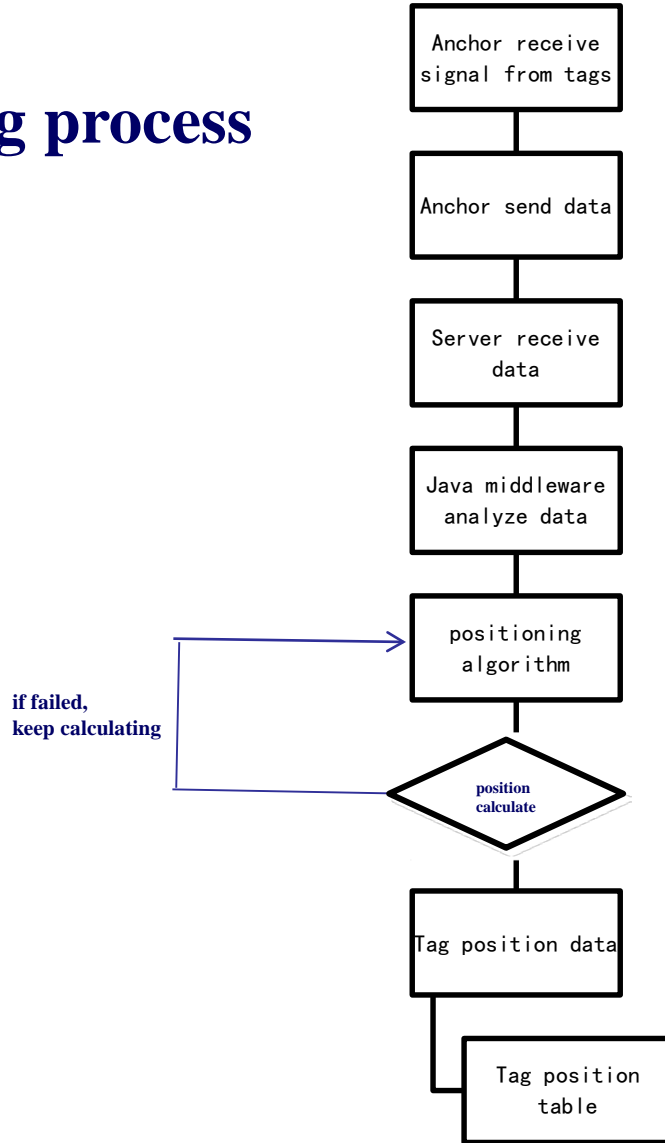


The API of our server

Table 3		
API address	API usage	API description
/getdist/	Get the location of all existing anchor	GET interface, enter directly after the return of all databases in the existing anchor address and its location.
/addAnchor/	Add or update the position of anchor	POST sent the key' s type is anchor' s type, position is anchor' s position, mac is anchor' s address. Return flag = 1 if successful, return flag = 2 if succeed in updating existing anchor, else return flag = 0
/import_inf/	receive rssi value for subsequent position operations.	POST , format is json string, key eui is the name of anchor ,time is time ,value are some strings ,in value, mac is the position of node which is received by anchor , rssi is rssi. Return flag=1 if success , else return flag=0.
/getTag/	Gets position of the target node	Using GET , key type is the type of target node , mac is the address of target node. The return value is the last location received by the target node. time of get this position and flag , if success return flag=1 , else return flag=0
/register/	register	Using POST , key userid is the id , passwd is password , name is name , usertype is type of user , "2" is general user , "1" is admin , mobile is the phone number , sexual , " 0" is female , " 1" is male Return value : " 2" stands for the user is existed , " 1" stands for failed , " 0" stands for success
/add_friend_by_userid/	Add friend by user' s id	Using POST , userid is the user' s id , friendid is another user' s id , return a string , " 0" is success , "1" stands for the friend is not existed , "2" stands for they are already friends.
/add_ble/	Add ble into database	Using POST ,ssid is the ssid whose key is ble ,Property string , rssi is the strength of its rssi , string , position(xy), string , if success, return 1
/query_map_user/	Find all users throughout map ids	Using POST 发送 , mapid' s key is mapid Return value is string(userid , (position_x,position_y))
Update hints		/req_rssi/ 、 /query_map_user/ and /add_ble/ update



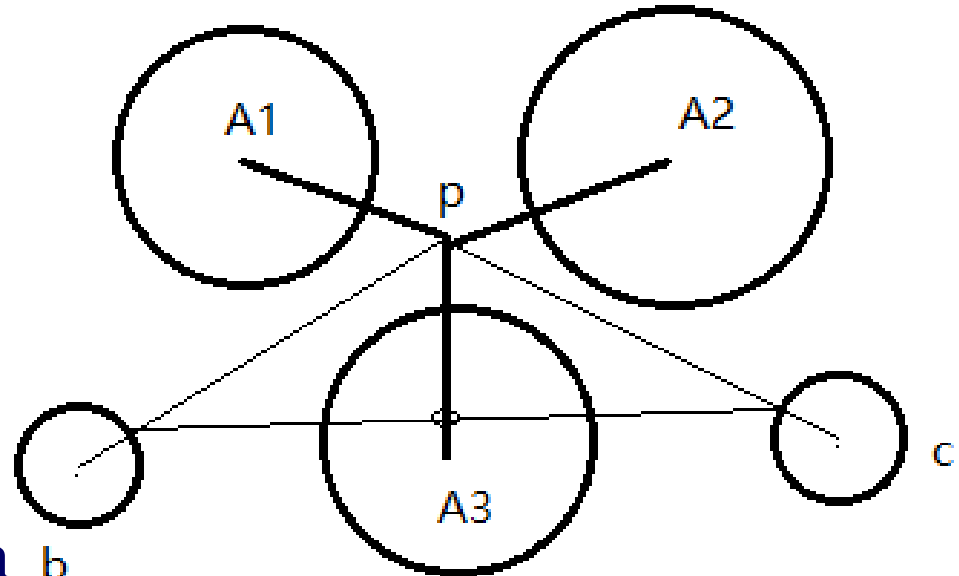
Positioning process





Algorithm

- data filtering
- triangle positioning
- some problems in it
- improved algorithm **b**
(two special rssi)
- kalman filtering





pressure test

HTTP请求.imx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.imx) - Apache JMeter (3.2 r1790748) - □ ×
HTTP请求.jmx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.jmx) - Apache JMeter (3.2 r1790748) - □ ×
HTTP请求.jmx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.jmx) - Apache JMeter (3.2 r1790748) - □ ×
HTTP请求.jmx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.jmx) - Apache JMeter (3.2 r1790748) - □ ×
HTTP请求.jmx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.jmx) - Apache JMeter (3.2 r1790748) - □ ×
HTTP请求.jmx (F:\Downloads\apache-jmeter-3.2\bin\HTTP请求.jmx) - Apache JMeter (3.2 r1790748) - □ ×

文件 编辑 Search 运行 选项 帮助

00:00:22 0 0 / 150

测试计划
线程组
HTTP请求
HTTP信息头管理器
用表格察看结果
聚合报告
察看结果树
线程组
HTTP请求
HTTP信息头管理器
用表格察看结果
聚合报告
察看结果树
线程组
HTTP请求
HTTP信息头管理器
用表格察看结果
聚合报告
察看结果树
工作台

察看结果树

名称: 察看结果树
注释:

所有数据写入一个文件
文件名: 浏览... Log/Display Only: 仅日志错误 Successes

Search: Case sensitive Regular exp.

Text

取样器结果	请求	响应数据
×	HTTP请求	Thread Name: 线程组 1-10
×	HTTP请求	Sample Start: 2017-05-20 01:13:17 CST
×	HTTP请求	Load time: 21010
×	HTTP请求	Connect Time: 0
×	HTTP请求	Latency: 0
×	HTTP请求	Size in bytes: 1888
×	HTTP请求	Sent bytes:0
×	HTTP请求	Headers size in bytes: 0
×	HTTP请求	Body size in bytes: 1888
×	HTTP请求	Sample Count: 1
×	HTTP请求	Error Count: 1
×	HTTP请求	Data type ("text" "bin"): text
×	HTTP请求	Response code: Non HTTP response code: java.net.ConnectException
×	HTTP请求	Response message: Non HTTP response message: Connection timed out: connect



Thank you!

