

Version 1.0

### **DATABASE STRUCTURE**

## **LOGIN TABLE**

LoginEmail Address	Varchar (255)	Primary Key
Password	Varchar (255)	
UserType	Varchar (255)	
VerifiedUser	Boolean	

# CROWD SOURCING PARTICIPATION TABLE

LoginEmailAddress	Varchar (255)	Primary Key
Name	Varchar (255)	
Surname	Varchar (255)	
MobileNumber	Varchar (255)	

# CROWD SOURCING EXPOSED ELEMENTS TABLE

LoginEmailAddress	Varchar (255)	Primary Key
Address	Varchar (4096)	
NumberofResidents	Integer (3)	
AgeRangeMin	Varchar (255)	
AgeRangeMax	Varchar (255)	
LimitedMobility	Integer(3)	
ElderlyPeople	Integer(3)	

# **CROWD SOURCING DAMAGES TABLE**

LoginEmailAddress	Varchar (255)	
TypeofView	Varchar (4096)	
TypeofDamage	Varchar (4096)	
PeopleInvolved	Integer(4)	
ImageUrl	Varchar(1024)	
DateTime	Timestamp	

# CROWD SOURCING WATER LEVEL TABLE

LoginEmailAddress	Varchar (255)	
WaterHeight	Integer(3)	
ImageUrl	Varchar(255)	
DateTime	Timestamp	

### **SAVE FAMILY TABLE**

LoginEmailAddress	Varchar (255)	
FamilyMember	Varchar (4096)	

# **SUBMIT FAMILY TABLE**

LoginEmailAddress	Varchar (255)	
FamilyMember	Varchar (4096)	

### SAVE EXTERNAL CONTACTS TABLE

LoginEmailAddress	Varchar (255)	
ExternalContact	Varchar (4096)	

### SUBMIT EXTERNAL CONTACTS TABLE

LoginEmailAddress	Varchar (255)	
ExternalContact	Varchar (4096)	

### SAVE USEFUL NUMBERS TABLE

LoginEmailAddress	Varchar (255)	
UsefulNumbers	Varchar (4096)	

### SUBMIT USEFUL NUMBERS TABLE

LoginEmailAddress	Varchar (255)
UsefulNumbers	Varchar (4096)

## SAVE FLOOD EQUIPMENT TABLE

LoginEmailAddress	Varchar (255)
FloodEquipment	Varchar (4096)

## SUBMIT FLOOD EQUIPMENT TABLE

LoginEmailAddress	Varchar (255)	
FloodEquipment	Varchar (4096)	

## SAVE INSURANCE COVER TABLE

LoginEmailAddress	Varchar (255)	
InsuranceCover	Varchar (4096)	

# SUBMIT INSURANCE COVER TABLE

LoginEmailAddress	Varchar (255)
InsuranceCover	Varchar (4096)

### SAVE TURN OFF SUPPLIER TABLE

LoginEmailAddress	Varchar (255)
TurnOffSupplier	Varchar (4096)

### SUBMIT TURN OFF SUPPLIER TABLE

LoginEmailAddress	Varchar (255)
TurnOffSupplier	Varchar (4096)

## SAVE WARNING CODES TABLE

LoginEmailAddress	Varchar (255)
WarningCodes	Varchar (4096)

### SUBMIT WARNING CODES TABLE

LoginEmailAddress	Varchar (255)
WarningCodes	Varchar (4096)

## **USER LOCATION TABLE**

LoginEmailAddress	Varchar (255)	Primary Key
Latitude	Varchar (255)	
Longitude	Varchar (255)	

# **Webservices**

#### REGISTRATION WEBSERVICE

o <a href="http://www.xyz.co.uk/register.php">http://www.xyz.co.uk/register.php</a>

Upload registration details in JSON format

```
"mappers": { =
    "email": "john@smith.co.uk",
    "password": "abc",
    "user": "mappers-c"
}
```

- o <a href="http://www.xyz.co.uk/login.php">http://www.xyz.co.uk/login.php</a>
- Upload login details in JSON format

```
"mappers": { =
    "email": "john@smith.co.uk",
    "password": "abc"
}
```

o <a href="http://www.xyz.co.uk/login.php">http://www.xyz.co.uk/login.php</a>

• If successful login:

```
"mappers": { □
    "login": "successful",
    "user": "mappers-c"
}
```

o <a href="http://www.xyz.co.uk/login.php">http://www.xyz.co.uk/login.php</a>

• If login failed due to wrong username:

```
"mappers": { =
    "login": "failed",
    "reason": "wrong username"
}
```

o <a href="http://www.xyz.co.uk/login.php">http://www.xyz.co.uk/login.php</a>

• If login failed due to wrong password:

```
"mappers": { □
    "login": "failed",
    "reason": "wrong password"
}
```

#### FORGOT PASSWORD WEBSERVICE

- <a href="http://www.xyz.co.uk/forgotpassword.php">http://www.xyz.co.uk/forgotpassword.php</a>
- The email address is uploaded in JSON format

```
"mappers": { 
    "email": "john@smith.co.uk"
}
```

#### FORGOT PASSWORD WEBSERVICE

• <a href="http://www.xyz.co.uk/forgotpassword.php">http://www.xyz.co.uk/forgotpassword.php</a>

• If the email address is found

#### FORGOT PASSWORD WEBSERVICE

- <a href="http://www.xyz.co.uk/forgotpassword.php">http://www.xyz.co.uk/forgotpassword.php</a>
- If the email address is not found on the server

```
"mappers": { =
    "forgotpassword": "failed",
    "reason": "wrong username"
}
```

# CROWD SOURCING PARTICIPATION WEBSERVICE

- <a href="http://www.xyz.co.uk/crowdparticipation.php">http://www.xyz.co.uk/crowdparticipation.php</a>
- The data will be uploaded in json format.

```
"mappers": [ \Box
   "loginemail": "john@smith.co.uk",
   "name": "john",
   "surname": "smith",
   "mobile": "+44123456"
```

# CROWD SOURCING PARTICIPATION WEBSERVICE

- <a href="http://www.xyz.co.uk/crowdparticipation.php">http://www.xyz.co.uk/crowdparticipation.php</a>
- If the data is successfully uploaded.

```
"mappers": { \( \subseteq \)
        "dataupload": "successful"
     }
}
```

# CROWD SOURCING PARTICIPATION WEBSERVICE

- <a href="http://www.xyz.co.uk/crowdparticipation.php">http://www.xyz.co.uk/crowdparticipation.php</a>
- If the data upload fails.

```
"mappers": { \( \exists \)
    "dataupload": "failed"
}
```

# CROWD SOURCING EXPOSED ELEMENTS WEBSERVICE

- o http://www.xyz.co.uk/crowdexposedelements.php
- The data is uploaded in JSON format.

```
{ □
   "mappers": { 🖃
      "loginemail": "john@smith.co.uk",
      "address": "9, Buckingham Palace",
      "residents": "2",
      "agerangemin": "<15",
      "agerangemax": ">60",
      "limitedmobility": "2",
      "elderlypeople": "2"
```

# CROWD SOURCING DAMAGES WEBSERVICE

- o <a href="http://www.xyz.co.uk/crowddamages.php">http://www.xyz.co.uk/crowddamages.php</a>
- The data is uploaded in JSON format.

```
{ □
   "mappers": { 🗏
      "loginemail": "john@smith.co.uk",
      "typeofview": "top",
      "typeofdamage": "severe",
      "peopleinvolved": "2",
      "uploadimage": "yes"
```

# CROWD SOURCING DAMAGES WEBSERVICE

- o <a href="http://www.xyz.co.uk/crowddamages.php">http://www.xyz.co.uk/crowddamages.php</a>
- The URL will return response in JSON Format. The file name is current unix timestamp concatenated with a four digit random number.

```
"mappers": { :=
     "dataupload": "successful",
     "filename": "14246963681234"
}
```

# CROWD SOURCING IMAGE UPLOAD WEBSERVICE

- o <a href="http://www.xyz.co.uk/imageupload.php">http://www.xyz.co.uk/imageupload.php</a>
- Once the image is uploaded successfully, the following response is received.

```
"mappers": { □
    "imageupload": "successful"
    }
}
```

# CROWD SOURCING IMAGE UPLOAD WEBSERVICE

- o <a href="http://www.xyz.co.uk/imageupload.php">http://www.xyz.co.uk/imageupload.php</a>
- Once the image is uploaded successfully, the following response is received.

```
"mappers": { □
    "imageupload": "successful"
    }
}
```

# CROWD SOURCING WATER LEVEL WEBSERVICE

- o <a href="http://www.xyz.co.uk/waterlevel.php">http://www.xyz.co.uk/waterlevel.php</a>
- The data is uploaded in JSON format.

```
"mappers": { =
    "loginemail": "john@smith.co.uk",
    "waterheight": "100 cms",
    "imageupload": "yes"
}
```

## FLOOD PLAN WEBSERVICE

- <a href="http://www.xyz.co.uk/floodplansave.php">http://www.xyz.co.uk/floodplansave.php</a>
- The data is uploaded in JSON format.

```
"mappers": { =
    "loginemail": "john@smith.co.uk",
    "familymembers": "Simone-Farmer, Nadia-Secretary",
    "externalcontacts": "Pippo-383746327, Lucia-34657489",
    "usefulnumbers": "Contact 1-338596960, Contact 2-346500330, Contact n-351865655",
    "floodequipment": "Bags, Medicines, Safety Guide",
    "insurancecover": "Flood Damage, Insurance Company, Insurance Claim",
    "turnoffsupplier": "Ask Supplier, Help to turn off, Mark taps or switches",
    "warningcodes": "Flood Alert, Flood Warning, Severe Flood Warning"
}
```

## FLOOD PLAN WEBSERVICE

- <a href="http://www.xyz.co.uk/floodplansubmit.php">http://www.xyz.co.uk/floodplansubmit.php</a>
- The data is uploaded in JSON format.

```
"mappers": { :=
    "loginemail": "john@smith.co.uk",
    "familymembers": "Simone-Farmer, Nadia-Secretary",
    "externalcontacts": "Pippo-383746327, Lucia-34657489",
    "usefulnumbers": "Contact 1-338596960, Contact 2-346500330, Contact n-351865655",
    "floodequipment": "Bags, Medicines, Safety Guide",
    "insurancecover": "Flood Damage, Insurance Company, Insurance Claim",
    "turnoffsupplier": "Ask Supplier, Help to turn off, Mark taps or switches",
    "warningcodes": "Flood Alert, Flood Warning, Severe Flood Warning"
}
```

## FLOOD PLAN WEBSERVICE

- <a href="http://www.xyz.co.uk/citizenlocation.php">http://www.xyz.co.uk/citizenlocation.php</a>
- The data is uploaded in JSON format.

```
"mappers": { \( \sigma\)
    "loginemail": "john@smith.co.uk",
    "latitude": "35.27861",
    "longitude": "-3.7516"
}
```

## DOWNLOAD PROFILE WEBSERVICE

- <a href="http://www.xyz.co.uk/downloadprofile.php?logine">http://www.xyz.co.uk/downloadprofile.php?logine</a> mail=john@smith.co.uk
- The data will be downloaded in JSON format.
- Please see next slide for the response from the server.

```
{ ⊟
   "mappers": { \Box
      "crowdsourcing": { -
         "name": "john",
         "surname": "smith",
         "mobile": "+44123456"
      "crowdexposedelements": { \Box
         "address": "9, Buckingham Palace",
         "residents": "2",
         "agerangemin": "<15",
         "agerangemax": ">60",
         "limitedmobility": "2",
         "elderlypeople": "2"
      "floodplansave": { \square
         "familymembers": "Simone-Farmer, Nadia-Secretary",
         "externalcontacts": "Pippo-383746237, Lucia-34657489",
         "usefulnumbers": "Contact1-33859690, Contact2-34650030",
         "floodequipment": "Bags, Medicine, Safety Guide",
         "insurancecover": "Flood Damage, Insurance Company, Insurance Claim",
         "turnoffsupplier": "Ask Supplier, Help to turn off",
         "warningcodes": "Flood Alert, Flood Warning, Severe Flood Warning"
```

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## VOLUNTEERS WEBSERVICE

## ADDITIONAL DATABASE

## **DANGER DATABASE**

LoginEmailAddress	Varchar (255)	
DangerStatus	Varchar (4096)	
DangerVisibility	Varchar (4096)	
DateTime	Timestamp	

## **HAZARDS DATABASE**

LoginEmailAddress	Varchar (255)	
Typology	Varchar (4096)	
HazardSources	Varchar (4096)	
AccidentType	Varchar (4096)	
MaterialState	Varchar (4096)	
MaterialTypology	Varchar (4096)	
SpillState	Varchar (4096)	
Oil Level	Varchar (4096)	
ExplosionType	Varchar (4096)	
DateTime	Timestamp	

## FACILITIES DATABASE

LoginEmailAddress	Varchar (255)	
Typology	Varchar (4096)	
Number	Varchar (4096)	
TypeOfBuilding	Varchar (4096)	
GroundType	Varchar (4096)	
VehicleType	Varchar (4096)	
DateTime	Timestamp	

## DANGER WEBSERVICE

- o <a href="http://www.xyz.co.uk/danger.php">http://www.xyz.co.uk/danger.php</a>
- The data is uploaded in JSON format.

```
"mappers": { \( \exists \)
    "loginemail": "john@smith.co.uk",
    "dangerstatus": "high",
    "dangervisibility": "visible"
}
```

#### HAZARDS WEBSERVICE

- o <a href="http://www.xyz.co.uk/hazards.php">http://www.xyz.co.uk/hazards.php</a>
- The data is uploaded in JSON format.

```
{ 🖃
   "mappers": { 🖃
      "loginemail": "john@smith.co.uk",
      "Typology": "unknown",
      "HazardSources": "oil",
      "AccidentType": "Car crash",
      "MaterialState": "Liquid",
      "MaterialTypology": "unknown",
      "SpillState": "High",
      "OilLevel": "Low",
      "ExplosionType": "None"
```

## FACILITIES WEBSERVICE

- o <a href="http://www.xyz.co.uk/facilities.php">http://www.xyz.co.uk/facilities.php</a>
- The data is uploaded in JSON format.

```
{ ⊟
   "mappers": { ⊟
      "loginemail": "john@smith.co.uk",
      "Typology": "unknown",
      "Number": "23",
      "TypeOfBuilding": "Victorian",
      "GroundType": "Liquid",
      "VehicleType": "Bus"
```

## **ADDITIONAL** REQUIREMENTS

- Web Based User Interface to display all values and search for specific values.
- Push Notification to display whether a volunteer is active, not active, in threat of life or not in threat of life.