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Notification and Reporting of Natural Hazards with Mobile Apps and Crowd-sourcing

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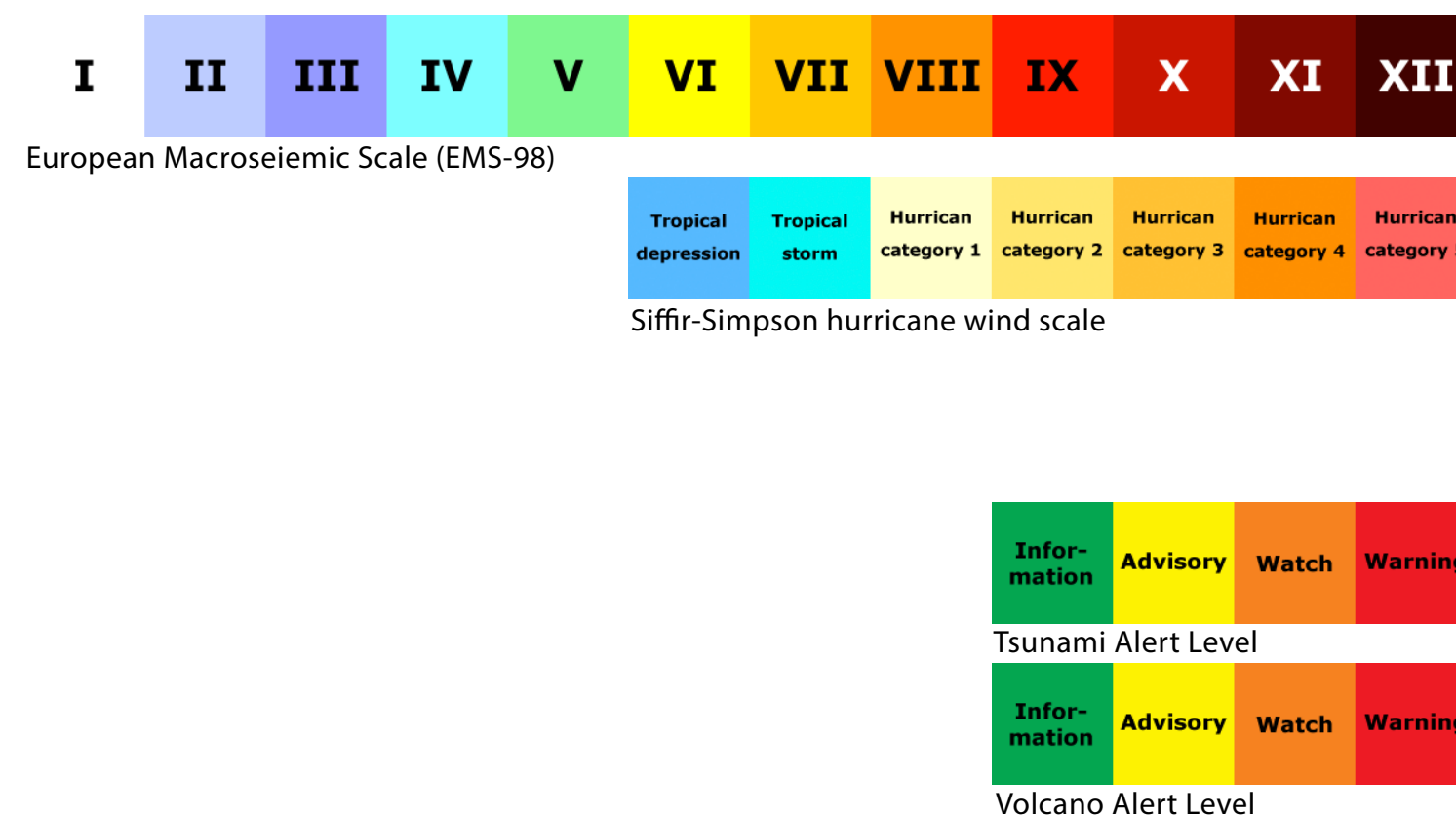
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Characteristics

The Android App Geohazard provides information on natural hazards recently occurred or expected. Latest information is harvested from data sources of various organisations around the world. So far, information is provided on earthquake, tsunami, flood, cyclone and volcano events.

Additionally, Geohazard can be used to immediately send eyewitness reports to an instance of the crowd-mapping platform Ushahidi, which is used repeatedly since the devastating 2010 earthquake in Haiti to collect eyewitness reports in natural disasters. Reports can be sent to a pre-configured Ushahidi instance for demonstration purposes or alternatively to your own Ushahidi instance. Reports created and sent with the Geoahazard App contain geographical information, damage estimations, an event description and pictures

Natural Hazards

- Earthquake
- Cyclone
- Flood
- Tsunami
- Volcano

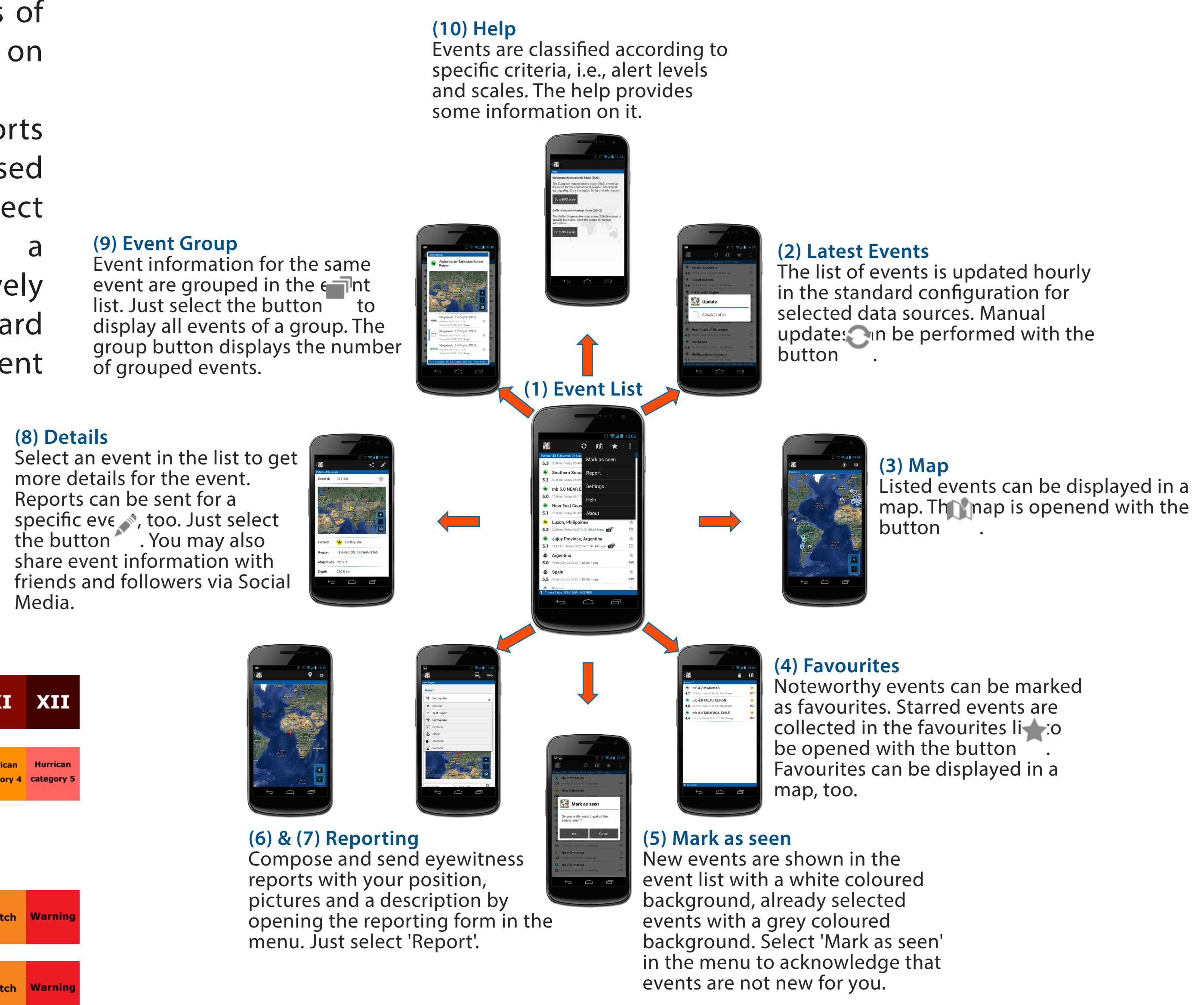| I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII

European Macroseiemic Scale (EMS-98)

Tropical depression	Tropical storm	Hurricane category 1	Hurricane category 2	Hurricane category 3	Hurricane category 4	Hurricane category 5

Siffir-Simpson hurricane wind scale

Infor- mation	Advisory	Watch	Warning

Tsunami Alert Level

Infor- mation	Advisory	Watch	Warning

Volcano Alert Level

Data Sources

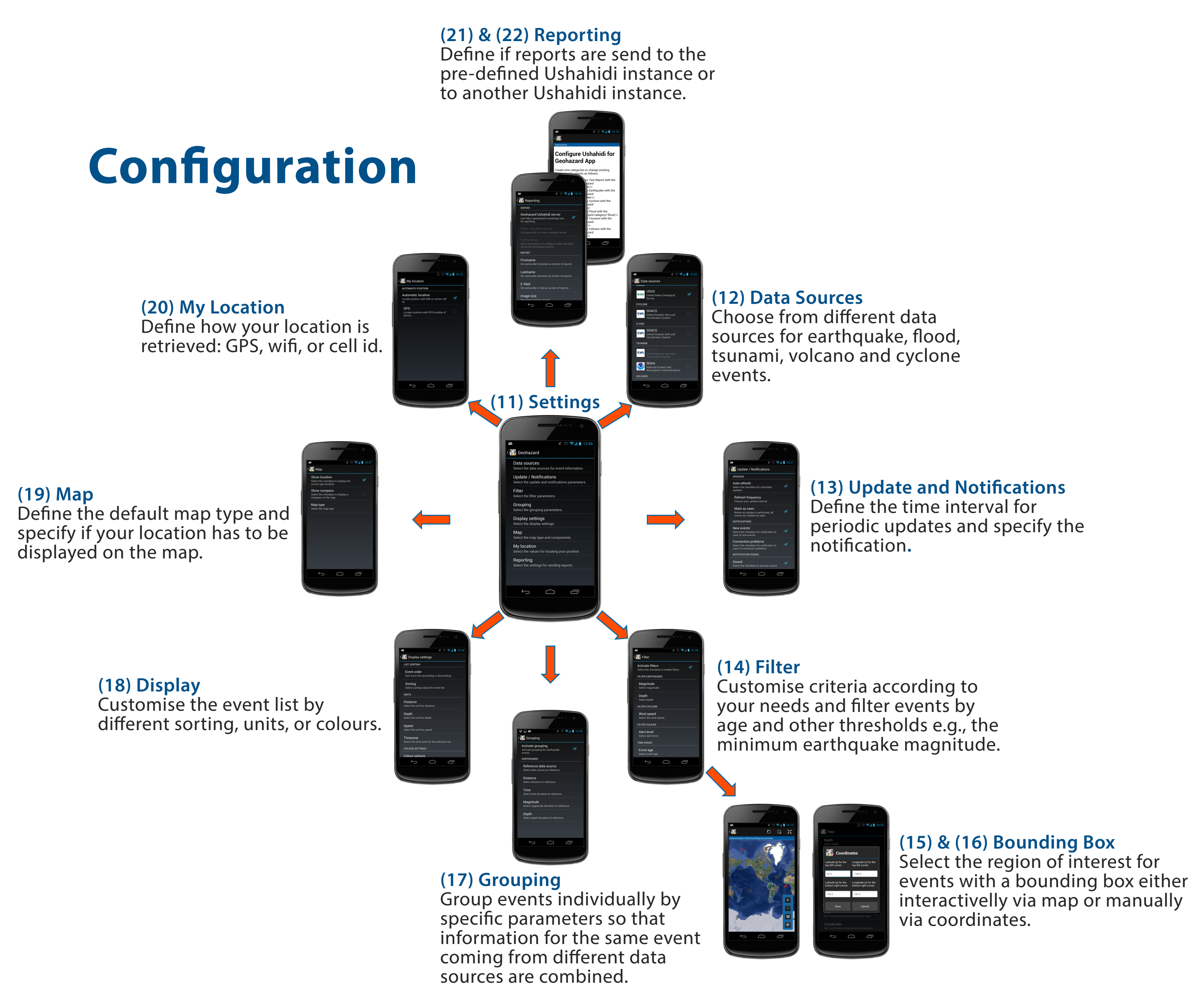|	
British Geological Survey	
Badan Meteorologi, Klimatologi, dan Geofisika	
European Mediterranean Seismological Centre	
Geoscience Australia	
Global Disaster Alert and Coordination System	
GFZ German Research Centre for Geosciences	
GNS Science New Zealand	
Instituto Portugues do Mar e da Atmosfera	
Incorporated Research Institutions for Seismology	
Kandilli Observatory and Earthquake Research Institute	
National Observatory Athens	
National Oceanic and Atmospheric Administrations	
Natural Resources Canada	
Saudi Geological Survey	
United States Geological Survey	

Google Play
The Android App Geohazard is available in the Google Play Store and can be installed for free. If you are interesred use the QR code to start the download.

Contact
For any questions or suggestions please send us an email:
geohazard@gfz-potsdam.de

User Interface

(10) Help
Events are classified according to specific criteria, i.e., alert levels and scales. The help provides some information on it.

(9) Event Group
Event information for the same event are grouped in the event list. Just select the button to display all events of a group. The group button displays the number of grouped events.

(2) Latest Events
The list of events is updated hourly in the standard configuration for selected data sources. Manual updates can be performed with the button.

(1) Event List

(8) Details
Select an event in the list to get more details for the event. Reports can be sent for a specific event, too. Just select the button. You may also share event information with friends and followers via Social Media.

(3) Map
Listed events can be displayed in a map. The map is openend with the button.

(4) Favourites
Noteworthy events can be marked as favourites. Starred events are collected in the favourites list to be opened with the button. Favourites can be displayed in a map, too.

(6) & (7) Reporting
Compose and send eyewitness reports with your position, pictures and a description by opening the reporting form in the menu. Just select 'Report'.

(5) Mark as seen
New events are shown in the event list with a white coloured background, already selected events with a grey coloured background. Select 'Mark as seen' in the menu to acknowledge that events are not new for you.

Configuration

(21) & (22) Reporting
Define if reports are send to the pre-defined Ushahidi instance or to another Ushahidi instance.

(20) My Location
Define how your location is retrieved: GPS, wifi, or cell id.

(12) Data Sources
Choose from different data sources for earthquake, flood, tsunami, volcano and cyclone events.

(11) Settings

(19) Map
Define the default map type and specify if your location has to be displayed on the map.

(13) Update and Notifications
Define the time interval for periodic updates and specify the notification.

(18) Display
Customise the event list by different sorting, units, or colours.

(14) Filter
Customise criteria according to your needs and filter events by age and other thresholds e.g., the minimum earthquake magnitude.

(17) Grouping
Group events individually by specific parameters so that information for the same event coming from different data sources are combined.

(15) & (16) Bounding Box
Select the region of interest for events with a bounding box either interactively via map or manually via coordinates.

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