

# GTD Crowdsourcing Form (AJAKENT)

## Global Terrorism Database (GTD) Crowdsourcing Project <http://gtd.netai.net>

### Documentation

1. Website: <http://gtd.netai.net>
2. Database (fields): [Database \(SubmissionForm\).pdf](#)
3. Files (php and html):
  - i. [index.php](#)
  - ii. [Submit.html](#)
  - iii. [Submit2.php](#)
  - iv. [ReportQuery.html](#)
  - v. [Report.php](#)
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4. Dummy Data: [GTD dummy data.pdf](#)
5. Screenshots:
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  - i. [GTD Storyboard.pdf](#)
  - ii. Links to form storyboards: [Submission Form](#) and [Report Form](#)
7. Global Terrorism Database (University of Maryland): <http://www.start.umd.edu/gtd/>

### Description

In an interest to improve and promote the collection and cataloging of grey source material (see this site for more on grey lit: <http://www.greynet.org/>). The GTD site, datasets, collection methodology, and codebook is an exemplar use of cataloging and organizing grey sources. To this end, this project would present an example of how crowdsourcing can be implemented into the grey source data collection process.

This project will allow for public submissions of reported/eye-witness terrorist attacks, which can be used by analysts to review and follow-up on crowdsourced data. The focus will be on creating a form to accept submitter input and a program that can pull information from a database to generate a report. Database creation and management will be supported by Dr. Kules.

### Client contacts

While this project may not have client contacts, all efforts will be made to have clients who can test both the functional use and substantive usefulness of the project.

Substantive usefulness: this project will attempt to reach out to GTD analysts and other similar users that may have an interest in the substantive topic of the data. This will allow feedback from users familiar with the data and can provide suggestions on (1) additional data that should be collected and (2) display preferences of generated reports.

Functional usability: this project will reach out to database users as well as others who have a some background in using databases to ensure that basic functions are intuitive.

### Team members

- Angela J.A. Kent, [aranas@cua.edu](mailto:aranas@cua.edu)

## Required capabilities

1. The program should accept the fields as listed here (under broad categories): <http://www.start.umd.edu/gtd/using-gtd/>
2. The program should include the following additional fields: (a) source information (e.g. local newspaper/eye witness/discussion board etc.) (b) submitter's contact information (including name, email/phone)
3. The program should generate a report with the above input fields
4. The program should at minimum be filtered by Country, State/Province, City, Incident Date, and Submitter Information
5. Time/scope permitting: the program should work with the Exhibit map and other filter options: <http://www.simile-widgets.org/exhibit/>

## Additional capabilities

1. Database creation/management: a database will be required to accept input and to provide data for report generation. The [Exhibit](#) code may provide a means of easier database creation/management. Please view this page and page source: <http://staff.cua.edu/aranas/ISC555/Assignment4.html>
  - i. For this assignment, we created an "Exhibit" readable database using datasets created in Zotero, run through MySQL, and eventually read through a Google docs spreadsheet. An RSS feed allows for more data to be included and constantly updated.
  - ii. One challenge may be seeing how the Exhibit code can be hacked to update and be used to generate a report outside of the Exhibit widgets code.

## Needed materials and sources

- Data fields as listed under GTD's broad categories: <http://www.start.umd.edu/gtd/using-gtd/>
- GTD datasets for dummy code testing and input (downloaded and available for download here): <http://www.start.umd.edu/gtd/contact/>
- Exhibit developer information: <http://www.simile-widgets.org/exhibit3/>

## Specifications

1. Intended Users
  - i. The intended users are (1) GTD analysts and (2) other researchers interested in collecting similar data and building a similar form/database system. For the former, this provides additional sources of data points. To note, an open invitation for feedback was sent to GTD, but no responses as of November 4, 2013. It is worth noting that annual updates were anticipated after 2011, but not promised. For the latter, this could include political scientists, policy researchers, counter-terrorism agents and analysts. For the purposes of this project, users will be approached for usability testing.
2. Scenario(s) and/or use cases
  - i. A GTD analyst is collecting information on terrorist events and wants to ensure that they have reviewed all potential events. Since data has been collected and made available for events between 1970-2011, the analyst may be interested in events that occurred for the last 2 years (2012 and 2013). They may also be interested in adding other data to prior years as well. The GTD Crowdsourcing project would allow the analyst to generate a report that would list all recent submissions and, possibly, filter to get results for a certain year, certain type of attack, etc. The results from the report are new avenues to research and determine whether such events can or should be included in the GTD data set. If further details/information is required, the analyst also has access to the Submitter's contact information.
  - ii. An academic/policy researcher is beginning to collect research on a specific region. They want to collect information on any and all terrorist events that occurred during any period of time. They would prefer eye witness or close hand knowledge of the incident (e.g., not international news reports). The researcher can select preferences and generate a report of that provide starting events to begin their research, as well as providing sources for primary research (e.g., submitter's who were eyewitnesses or contributors to discussion forums)
3. Preliminary functional requirements:
  - i. The program shall accept input that can be accepted by a database
  - ii. The program shall pull information from the database and generate a report
4. Storyboard sketches (lo-fi prototypes)
  - i. [GTD Storyboard.pdf](#)
  - ii. Links to form storyboards: [Submission Form](#) and [Report Form](#)
5. Other: see [Categories](#)

## Database

[Database \(SubmissionForm\).pdf](#)

# Prototype 1

Website: [gtd.netai.net](http://gtd.netai.net)

1. The program should accept the fields as listed here (under broad categories): [http://www.start.umd.edu/gtd/using\\_gtd/](http://www.start.umd.edu/gtd/using_gtd/)
2. The program should include the following additional fields: (a) source information (e.g. local newspaper/eye witness/discussion board etc.) (b) submitter's contact information (including name, email/phone) [Categories](#)

# Specifications 2

1. The program should accept the fields as listed here (under broad categories): [http://www.start.umd.edu/gtd/using\\_gtd/](http://www.start.umd.edu/gtd/using_gtd/)
  - i. Create a database that includes a table that can accept each field
2. The program should include the following additional fields: (a) source information (e.g. local newspaper/eye witness/discussion board etc.) (b) submitter's contact information (including name, email/phone)
3. The program should generate a report with the above input fields
  - i. Ex.10 displays how to create a report of all records in the database
  - ii. Create a button/page to display all records-

# Prototype 2

Website: [gtd.netai.net](http://gtd.netai.net)

1. The program successful accepts all fields from a Submission Form
2. The program generates a report of all records
  - i. The Date Submitted (date stamp field is not working)

# Specifications 3

1. The program should accept the fields as listed here (under broad categories): [http://www.start.umd.edu/gtd/using\\_gtd/](http://www.start.umd.edu/gtd/using_gtd/)
2. The program should include the following additional fields: (a) source information (e.g. local newspaper/eye witness/discussion board etc.) (b) submitter's contact information (including name, email/phone)
3. The program should generate a report with the above input fields
  - i. The Date Submitted (date stamp field is not working)
4. The program should at minimum be filtered by Country, State/Province, City, Incident Date, and Submitter Information
  - i. Determine how to pull specific records from the database (use "where" function)
  - ii. Verify that all "show all records" are showing
  - iii. Determine how to pull specific records from the database based on Report Query form
  - iv. Input/import dummy data to test database-
    - a. Use GTD data for sample data
    - b. Use [Fake Name Generator](#) to generate dummy names and emails
  - v. Validate fields (name, email, phone)
5. Time/scope permitting: the program should work with the Exhibit map and other filter options: <http://www.simile-widgets.org/exhibit/>

Dummy Data: [GTD dummy data.pdf](#)

# Security and Authentication Considerations

Because this project is meant as an open source, crowdsourcing, collaborative endeavor, traditional security and authentication concerns are not applicable. Hence, for example, the use of the "\$\_GET" function, rather than "\$\_POST."

However, it will be important to protect against malicious inputs like spam (via HTML tags and inputs) and PHP inputs (e.g. drop table), as demonstrated in class. It is a possibility that actors who do not wish for incidents to be reported or collected would want to attach this type of database. Examples may include governments who do not want attacks reported for political or national security purposes; trade groups who do not attacks to be reported because it would threaten tourism or investment within the area; or individuals who do not want kin to provide their identifying information because of retaliatory action. Certainly, this last example represents a needed balance between needing Submitter information (to follow-up and verify) and protecting Submitter information (from bad actors).

Validation remains important since the value of the database is only as good as the information that is inputted. Due to the number of

submission fields, validation will assist with ensuring that valid forms of data are inputted. It may also be worth making some fields, like those under Submitter Information, required (i.e., forms will not be accepted unless these field are populated).

## Lessons Learned and Best Practices

- Consistency in label names
- Consistency in value names
- Use of pseudocode
- Use of "commenting out" to debug
- Have a "Test" subfile (e.g.: gtd.netai.net/Test)
- Thinking about forms in different conceptual ways. Be open to workarounds
- Must know and prioritize requirements

## Future Iterations

1. Build in error function if more than one search option is selected
2. Build out multi-search option (started)
3. Include a message if no record currently exists for search
4. Add CSS style formatting
5. Make Submitter Information fields required
6. Improve validation of all fields
7. Expand out date options (i.e. beyond year)
8. Time/scope permitting: the program should work with the Exhibit map and other filter options: <http://www.simile-widgets.org/exhibit/>