ExploX - Individual Contributions

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I am responsible for the complete implementation, where the main steps included

- setting up the server using Node.js.
- implementing a secure user management as well as log-in via Strava (OAuth).
- designing and implementing the database with tables for users, routes, activities and coordinates as well as spatial queries on geographic data.
- doing front-end design and implementation using Jade as templating engine and Bootstrap.
- integrating Leaflet.js with GeoJSON, MaskCanvas and Leaflet Routing Machine to display the activity map and routes. Preprocessing of the data in the backend.
- implementating the relevant Strava API calls and corresponding database hooks to store and retrieve the data.
- implementating a crawler to get all strava segments in a given area.
- implementating the route generation algorithm as described in detail in the main paper.
- implementating the user interface according to our paper prototypes for a good usability, especially for generating new routes.
- ... and of course some complementary work such as
- researching which libraries and services to use.
- studying their documentations and APIs.
- a lot of testing and debugging.
- time management and issue tracking using the Github issue tracker
- ... as well as project-related work including
- researching related work at the beginning of the seminar.

- mostly doing implementation-related parts of the presentations and writing the implementation chapter of the report.
- recording the video.
- rather passively helping with the design of the study.

LUKAS STROBEL

TODO

XUETING LI

TODO

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