fastar-jira

Project: behametrics-learn
Sorted by: Priority descending, then Updated descending
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T	Key	Status	Sprint	Created	Updated	Summary	Acceptance criteria	Description	Assignee
🔲	BEL-68	DONE	BEL Sprint 2	29/Oct/18	05/Nov/18	BEL-25 / Create repository for ML module		Create repository with appropriate name in https://gitlab.com/tp-fastar	Matej Končál
🔲	BEL-67	DONE	BEL Sprint 2	27/Oct/18	27/Oct/18	BEL-56 / Enable CORS and bulk insert on server-side		Configure the server to send an Access-Control-Allow-Methods response header that includes Content-Type	Matúš Kalafut
🔲	BEL-82	DONE	BEL Sprint 3	06/Nov/18	17/Nov/18	BEL-79 / Compute acceleration and jerk for each axis		For each mouse movement compute horizontal/vertical velocity and acceleration. Matej Končál suggest to write general function which accepts function in parameter and compute output (e. g. velocity) by passed function Use raw_logs.csv from http://www2.fiit.stuba.sk/~kratky/biometrics/data/web_ident_mouse/index.html . Select data from one user and count on them. We will do it per user session later.	Michal Manak
🔲	BEL-69	DONE	BEL Sprint 2	29/Oct/18	05/Nov/18	BEL-25 / Identify user sessions		For each event identify session in which event was logged. Matej Končál suggestion 2 events from same user belong to same user session, if their time difference is less than 30min. But make it general, so i want to change 1 variable to modify time threshold Use raw_logs.csv from http://www2.fiit.stuba.sk/~kratky/biometrics/data/web_ident_mouse/index.html	Michaela Balážová
🔲	BEL-70	DONE	BEL Sprint 2	29/Oct/18	05/Nov/18	BEL-25 / Compute velocity and acceleration		For each mouse movement compute horizontal/vertical velocity and acceleration. Matej Končál suggest to write general function which accepts function in parameter and compute output (e. g. velocity) by passed function Use raw_logs.csv from http://www2.fiit.stuba.sk/~kratky/biometrics/data/web_ident_mouse/index.html . Select data from one user and count on them. We will do it per user session later.	Matej Končál
🔲	BEL-71	DONE	BEL Sprint 2	29/Oct/18	05/Nov/18	BEL-26 / Split events to segments		For each event identify segment to which event belongs to. Split can be determined according to time interval, silence time, ... Matej Končál suggest to write general function which accepts function in parameter and identify split threshold by passed function Use raw_logs.csv from http://www2.fiit.stuba.sk/~kratky/biometrics/data/web_ident_mouse/index.html . Select data from one user and count on them. We will do it per user session later.	Matej Končál
🔲	BEL-18	DONE	BEL Sprint 1	08/Oct/18	15/Oct/18	BEL-17 / JIRA methodology		Create JIRA methodoogy.	Kamil Janeček
💡	BEL-17	DONE	BEL Sprint 1	08/Oct/18	22/Oct/18	Methodologies		Create all required methodologies.	Michal Manak
🔲	BEL-50	DONE	BEL Sprint 1	10/Oct/18	21/Oct/18	BEL-23 / Tests and DI		Find correct way to test python Flask applications. pytest some dependency injection or correct way to mock modules so we can easily make unit tests.	Kamil Janeček

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💡	BEL-1	DONE		02/Oct/18	15/Oct/18	VM setup	VM is setup correctly (nginx, jira, confluence, firewall, product app, TLS) Website is created and deployed.		Kamil Janeček
📋	BEL-4	DONE		02/Oct/18	08/Oct/18	BEL-1 / Setup webpage deploy to VM		Gitlab-CI -> copy to VM. / create user, folder, nginx settings/	Michal Manak
📋	BEL-108	IN PROGRESS	BEL Sprint 6	15/Nov/18	23/Dec/18	BEL-106 / Repository structure		atleast move docker-compose files to separate folder https://gitlab.com/tp-fastar/server	Kamil Janeček
📋	BEL-109	IN PROGRESS	BEL Sprint 6	15/Nov/18	23/Dec/18	BEL-106 / Documentation		docstrings readme	Kamil Janeček
⚡	BEL-147	IN PROGRESS		20/Dec/18	20/Dec/18	Internal improvements			Unassigned
✅	BEL-153	TO DO		20/Dec/18	20/Dec/18	Send remaining data on session end			Ján Vnenčák
🔖	BEL-150	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	Collect data for user authentication		As an experiment participant, I want raw data to be collected for use in user authentication.	Unassigned
🔖	BEL-152	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	User authentication			Unassigned
⚡	BEL-130	TO DO		10/Dec/18	20/Dec/18	Production demo for end users		~~BEL-124~~	Michal Manak
🔖	BEL-151	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	Store data for user authentication			Unassigned
💡	BEL-149	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	Technical debt - logger module			Ján Vnenčák
⚡	BEL-139	TO DO		12/Dec/18	20/Dec/18	Provide support for logging and analyzing keystroke data		As a researcher I want to log and analyze keystroke data so that I can experiment with user models using keystroke dynamics.	Unassigned
✅	BEL-118	DONE		27/Nov/18	20/Dec/18	Create survey about demo architecture possibilities		server -identifikuje sa session -stranka bude posielat eventy -ked stranka da pokyn ze su data vyzbierane, server bude vediet get a natrenovat -model ulozit a zo stranky prijmat data a klasifikovat stranka - dalsia aplikacia (2 mody - zbieranie, test: 2 fazy) - vymysliet scenar ML module - package	Unassigned

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☑	BEL-128	TO DO	BEL Sprint 6	06/Dec/18	20/Dec/18	Docker-compose - add networks			Matej Končál
💡	BEL-144	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	Modules packaging		Create NPM module for logger-web Create pip package (setup.py) for ml-module	Unassigned
💡	BEL-106	TO DO	BEL Sprint 6	15/Nov/18	20/Dec/18	Technical debt - server module			Kamil Janeček
💡	BEL-148	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	Create scenario for demo	Stories for demo implementation Document containing more technical info about demo application.	Plan demo execution.	Unassigned
💡	BEL-124	DONE	BEL Sprint 5	04/Dec/18	20/Dec/18	Create scenario for demo	Stories for demo implementation Document containing more technical info about demo application.	Plan demo execution.	Matúš Kalafut
🔖	BEL-11	IN PROGRESS	BEL Sprint 5, BEL Sprint 7	07/Oct/18	20/Dec/18	Allow to choose frequency of logging from mobile devices	Logged data visible on server for various frequency settings	As a researcher I want to be able to set the frequency of logging of individual sensors in order to preserve website performance while logging. If chosen frequency exceeds device frequency, keep all data.	Ján Vnenčák
🔖	BEL-89	DONE	BEL Sprint 4	07/Nov/18	20/Dec/18	Integration of data processing phases into pipeline	Dataframe containing needed values. Calculated metrics from them.	Phases: • derived column computation • feature extraction • user authentication wrapper	Matej Končál
⚡	BEL-24	TO DO		09/Oct/18	20/Dec/18	Apply preprocessing methods to logged data during analysis			Unassigned
🔖	BEL-127	TO DO		04/Dec/18	20/Dec/18	Select technique for handling class imbalance for user authentication		Default: No technique (do not handle class imbalance)	Unassigned
⚡	BEL-28	TO DO		09/Oct/18	20/Dec/18	Simplify training and testing of user models for experiments			Unassigned
🔖	BEL-114	TO DO		20/Nov/18	20/Dec/18	CLONE - Integration of data processing phases into pipeline		Phases: • derived column computation • feature extraction • user authentication wrapper • scalability evaluation wrapper	Unassigned
⚡	BEL-6	TO DO		06/Oct/18	20/Dec/18	Log and store raw data and events from websites			Unassigned

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☑	BEL-136	TO DO		11/Dec/18	20/Dec/18	Verify timestamp accuracy of logged data			*Unassigned*
🔖	BEL-102	TO DO		13/Nov/18	20/Dec/18	Create demo implementation of authentication process		As users of our product, we want to see our product in action.	*Unassigned*
🔖	BEL-12	TO DO		07/Oct/18	20/Dec/18	Log device metadata		As a researcher I want to log metadata about the currently used device for browsing so that I can distinguish raw data from different devices. Fields: • type - mouse, mobile device, ... • device sensor - touch, accelerometer, ... (undefined if type is mouse) • OS, version, model • a unique device identifier	*Unassigned*
🔲	BEL-146	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	BEL-144 / ml-module package			*Unassigned*
🔲	BEL-145	TO DO	BEL Sprint 6	20/Dec/18	20/Dec/18	BEL-144 / Logger package			*Unassigned*
🔲	BEL-143	DONE	BEL Sprint 5	19/Dec/18	20/Dec/18	BEL-124 / Create document with use cases			*Unassigned*
🔖	BEL-30	DONE	BEL Sprint 4, BEL Sprint 5	09/Oct/18	20/Dec/18	Scalability of user model w.r.t. number of users	DataFrame containing metrics for each provided setting	As a researcher I want to be able to assess the metrics for classification results w.r.t. the number of users in the model so that I can determine the scalability of the behavioral biometric user model. Example: Suppose I have data from 1000 users, I want to compute the accuracy of user identification for 5, 10, 20, 50, ... up to 1000 users. If the identification accuracy drops below e.g. 90% at 100 users, I can proclaim that my method is not usable for identification on the web for UX purposes for that many users.	Michal Manak
🔲	BEL-123	DONE	BEL Sprint 4, BEL Sprint 5	03/Dec/18	20/Dec/18	BEL-30 / Function for scalability results			Matúš Kalafut

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🔖	BEL-113	DONE	BEL Sprint 4, BEL Sprint 5	20/Nov/18	20/Dec/18	Log raw data from mobile devices	Show raw data in console	As a researcher I want to log raw data from mobile devices on the web so that I can use the data for further analysis. Mobile devices = for now, smartphones and tablets Raw data to log: • touch screen ○ touch coordinates (x, y) ○ timestamp (as precise as possible) ○ touch pressure (only one of these fields returns valid values, depending on the device) ○ touch events - start, end, move ○ touch identifier • sensors (accelerometer, gyroscope) ○ values (acceleration on x, y. z in m/s2, orientation on x, y, z in degrees) ○ timestamp Need to solve infinite data stream from sensors ! Some of the sensors (or fields therein) may not be supported on all browsers/devices, this may help: • https://github.com/Modernizr/Modernizr References: • https://developer.mozilla.org/en-US/docs/Web/API/Touch_events/Using_Touch_Events	Ján Vnenčák
🔖	BEL-62	DONE	BEL Sprint 5	23/Oct/18	20/Dec/18	Apply predefined criteria for splitting raw data to segments	Dataframe containing segment id	Examples of split criteria: • explicit events - for touch screen, all data between touch-down and touch-up form one segment (define start and end criteria by defining values of desired rows)	Michal Manak
🔲	BEL-131	DONE	BEL Sprint 5	11/Dec/18	20/Dec/18	BEL-62 / Create function for custom segment splitting		Create function that will split data to segments by custom defined start & end condition. 2 parameters - kwargs of begin row elements, kwargs of end row elements, time. time before, after Start of segment is defined by row that contains values as in first parameter (start row). End of segment is defined by row that contains values as in second parameter (end row).	Tomáš Jendrejčák
🔲	BEL-142	IN PROGRESS	BEL Sprint 5, BEL Sprint 7	19/Dec/18	20/Dec/18	BEL-11 / Implement sensors frequency limiter			Kamil Janeček
🔲	BEL-121	DONE	BEL Sprint 4, BEL Sprint 5	02/Dec/18	20/Dec/18	BEL-113 / Implement mobile events logging		Implementation of touch, accelerometer and gyroscope events logging deviceorientation: https://w3c.github.io/deviceorientation/ https://stackoverflow.com/questions/4378435/how-to-access-accelerometer-gyroscope-data-from-javascript test: https://whatwebcando.today/device-motion.html	Kamil Janeček
💡	BEL-126	DONE	BEL Sprint 5	04/Dec/18	15/Dec/18	Presentation for MTS		Create and prepare presentation for MTS.	Michal Manak

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🔶	BEL-125	DONE	BEL Sprint 5	04/Dec/18	15/Dec/18	Documentation - WS final		Prepare documentation for final submission.	Michaela Balážová
🔖	BEL-90	TO DO		07/Nov/18	14/Dec/18	Tag extracted features		As a researcher I want to tag extracted features so that I can better assess the appropriateness of each feature for specific goals of user modeling. Tags can help select relevant features and consequently improve recognition results. Example: • mean velocity - high observability (insecure, unsuitable for user authentication), good distinctiveness (for e.g. emotion recognition) • start/end x, y - high consistency and distinctiveness for specific gestures (e.g. active authentication), barely usable for free movements (e.g. continuous authentication) For each tag, each claim should be supported by providing links to relevant sources (journal articles, papers).	Unassigned
🔖	BEL-141	TO DO		12/Dec/18	14/Dec/18	Extract features for keystroke dynamics		Basic features: • dwell time • flight time (all 4 variants) Advanced features: • consider sequences of n successive key strokes (n-grams, I think?) • consider different groups of keys (control keys, space, letters, numbers, special characters, ...) • consider removal of keys (e.g. due to correction) For mobile devices, we can gain much more information due to the presence of touch screen and sensors. For example, we could measure the average offset from the center of a key on the keyboard, or how much the device is tilted or rotated for each individual key. Preprocessing should only be necessary for touch and sensor data, but probably not keystroke data.	Unassigned
🔖	BEL-140	TO DO		12/Dec/18	14/Dec/18	Log keystroke data from virtual keyboard from mobile devices on the web		As a researcher, I want to log keystroke data from mobile devices on the web so that I can analyze keystroke dynamics for the purpose of active user authentication. Raw data: the same keystroke raw data as for PC keyboards.	Unassigned
🟦	BEL-115	DONE	BEL Sprint 4	26/Nov/18	13/Dec/18	BEL-89 / Change implementation of authentication function		function in ml-module - authentication_metrics should return dataframe with 5 columns: • user_train (id) • real value (y_test) • predicted (y_pred) • probability 0 • probability 1	Matej Končál
🟦	BEL-116	DONE	BEL Sprint 4	27/Nov/18	13/Dec/18	BEL-89 / Create pipeline for callable object execution		Create class/function, which accepts list of callable object and executes them. Pipeline also accepts parameters for this objects and set them to object before execution.	Kamil Janeček

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🟩	BEL-36	DONE	BEL Sprint 4	09/Oct/18	13/Dec/18	Plot curves for FAR, FRR and EER	Plot per each user	x axis - classifier threshold y axis - FAR curve, FRR curve, EER (intersection of FAR and FRR) This plot only applies to classifiers yielding a continuous value on the output (probability, distance, etc.). If the threshold variable has a finite number of possible values, calculate FAR and FRR for each threshold value. Otherwise, select an interval to choose threshold values from and calculate FAR and FRR. If there is no threshold for which FAR = FRR, calculate EER from the two adjacent points where the FAR becomes greater than FRR or vice versa.	Tomáš Jendrejčák
🟦	BEL-122	DONE	BEL Sprint 4	03/Dec/18	13/Dec/18	BEL-36 / Create function for plotting FAR, FRR and EER			Michal Manak
🟦	BEL-137	DONE	BEL Sprint 5	11/Dec/18	13/Dec/18	BEL-125 / Add info about session request to product docu			Ján Vnenčák
🟦	BEL-134	DONE	BEL Sprint 5	11/Dec/18	13/Dec/18	BEL-125 / Specify fields in data format - logger module In product documentation			Ján Vnenčák
🟦	BEL-132	DONE	BEL Sprint 5	11/Dec/18	13/Dec/18	BEL-125 / Specify generation of technical documentation in "Dokumentácia"			Michal Manak
🟦	BEL-135	DONE	BEL Sprint 5	11/Dec/18	13/Dec/18	BEL-125 / Modify big picture - more specific			Matúš Kalafut
🟦	BEL-133	DONE	BEL Sprint 5	11/Dec/18	12/Dec/18	BEL-126 / Code review slide			Kamil Janeček
🟩	BEL-138	TO DO		12/Dec/18	12/Dec/18	Log keystroke data from PC keyboard on the web		As a researcher, I want to log keystroke data from a PC keyboard on the web so that I can analyze keystroke dynamics for the purpose of active user authentication. Raw data: • timestamp • key • event type - key press (down) or key release (up) • active control key(s) - ctrl, shift, ... • ...anything else? N.B.: Logging and sending actual keys over the network could pose legal problems. Key logging should be performed for experimental purposes only.	Unassigned
🟪	BEL-119	TO DO		28/Nov/18	12/Dec/18	Interactive Data Analysis		As a researcher, I want to experiment with behavioral biometric data interactively so that I can perform the analysis of behavioral biometric data more efficiently. Inspiration: • https://www.h2o.ai/products/h2o-driverless-ai/	Unassigned

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🔖	BEL-61	TO DO		23/Oct/18	11/Dec/18	Compute derived columns from raw data	Computed columns are visible in table with raw data.	Compute additional derived columns from raw data as per the IWC 2018 article that are not implemented yet. Make sure the columns are scalable with regards to: • the number of axes (e.g. mouse coordinates have two axes, accelerometer has three). Examples: velocity for each axis, velocity magnitude for each combination of axes (pairs, triplets, ...), angular velocity for each pair of axes. • the number of "sources" - a mouse has only one source of coordinates, Leap Motion yields 3D coordinates for a multitude of points on hands (palm, wrist, fingertips, finger joints).	Unassigned
🔖	BEL-9	TO DO		07/Oct/18	11/Dec/18	CLONE - Log raw data from mobile devices		As a researcher I want to log raw data from mobile devices on the web so that I can use the data for further analysis. Mobile devices = for now, smartphones and tablets Raw data to log: • touch screen ○ touch size ○ major and minor axis of touch area ○ do not forget to support multi-touch gestures • sensors (except of accelerometer, gyroscope) ○ values (e.g. acceleration in x, y. z) ○ timestamp Some of the sensors (or fields therein) may not be supported on all browsers/devices, this may help: • https://github.com/Modernizr/Modernizr References: • https://developer.mozilla.org/en-US/docs/Web/API/Touch_events/Using_Touch_Events	Unassigned
🔖	BEL-117	TO DO		27/Nov/18	11/Dec/18	CLONE - Apply predefined criteria for splitting raw data to segments		Examples of split criteria: • difference in values of a column • ○ e.g. rapid change in velocity -> new segment	Unassigned
🔖	BEL-35	TO DO		09/Oct/18	11/Dec/18	Plot DET curve		DET = detection error trade-off	Unassigned
🔖	BEL-34	TO DO		09/Oct/18	11/Dec/18	Plot ROC curve		ROC = receiver operating characteristic	Unassigned
🔖	BEL-129	TO DO		06/Dec/18	06/Dec/18	Classify sequences of samples		As a researcher I want to classify sequences of samples so that I can potentially improve classification results. Normally, we classify a single sample at a time, i.e. sequence length = 1. Sequence of samples could be defined as: • n consecutive samples • consecutive samples per specified time interval To combine the classified results to a single result, use: • majority voting for discrete labels • weighted sum for probabilities While binary classifiers are fairly easy to handle, multi-class probabilistic classifiers may very well not be a cakewalk.	Unassigned

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✅	BEL-120	DONE		28/Nov/18	04/Dec/18	Investigate & fix webpage deployment		https://gitlab.com/tp-fastar/webpage/blob/master/.gitlab-ci.yml	Matej Končál
🔧	BEL-101	DONE	BEL Sprint 3	12/Nov/18	03/Dec/18	BEL-29 / Create pipeline for user authentication evaluation		Create pipeline which trains classifier for each user in dataset and return metrics for each user. Subsequently compute statistics from this metrics, e.g. average values, ...	Michal Manak
💡	BEL-85	DONE	BEL Sprint 4	06/Nov/18	30/Nov/18	Documentation			Michaela Balážová
🔖	BEL-103	TO DO		13/Nov/18	28/Nov/18	Extract features from frequency domain			Unassigned
⚡	BEL-31	TO DO		09/Oct/18	28/Nov/18	Visualization of raw data, events, preprocessed data and results			Unassigned
🔖	BEL-37	TO DO		09/Oct/18	28/Nov/18	Add events to raw data visualization		Events: • device-specific (mouse-down, ...) • custom Different types of events should be marked differently.	Unassigned
🔖	BEL-33	TO DO		09/Oct/18	28/Nov/18	Visualization of segments			Unassigned
🔖	BEL-32	TO DO		09/Oct/18	28/Nov/18	Visualization of raw data			Unassigned
🔖	BEL-10	DONE		07/Oct/18	27/Nov/18	Allow to choose sensors to log from mobile devices		As a researcher, I want to be able to easily select which sensors from mobile devices are logged from a website so that I can obtain relevant data up front and potentially prevent degradation of the website performance.	Unassigned
✅	BEL-83	DONE	BEL Sprint 3	06/Nov/18	27/Nov/18	Survey of logging possibilities from mobile devices		Analyse possibilities of logging data from mobile devices sensors. Output should be stories in backlog with adequate description. document sensors not working ..	Ján Vnenčák
🔧	BEL-96	DONE	BEL Sprint 4	12/Nov/18	27/Nov/18	BEL-85 / Documentation of software engineering project	Documentation contains all described parts	Should cointan: • description of our project • our goals ○ what we want to achieve in our project • big picture ○ architecture • descrition of every module • technical documentation	Michal Manak
🔧	BEL-95	DONE	BEL Sprint 4	12/Nov/18	27/Nov/18	BEL-85 / Project management documentation	Documentation contain all described parts	Should cointain: • team members and their assigned roles • methodologies • completed sprints ○ summarizations, rectospetives • exports from JIRA	Michal Manak

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🔷	BEL-99	DONE	BEL Sprint 3	12/Nov/18	20/Nov/18	BEL-29 / Write estimator which wraps classfier		Write estimator which accepts Classifier in params. If I call fit on this transfomer, it will train this classifier. Output of predict function will return actual class labels and predicted class labels for each sample. no data balancing by default (should be optional)	Matej Končál
🔷	BEL-86	DONE	BEL Sprint 3	07/Nov/18	20/Nov/18	BEL-84 / Expose endpoint for data retrieval		Should accept sessionId to get dataset for selected session	Unassigned
🔷	BEL-110	DONE	BEL Sprint 6	16/Nov/18	20/Nov/18	BEL-106 / Add SAST checking		https://gitlab.com/help/user/project/security_dashboard https://gitlab.com/help/ci/examples/sast.md e.g.: https://gitlab.com/tp-fastar/server/pipelines/36906104/security	Unassigned
🟩	BEL-27	DONE	BEL Sprint 3	09/Oct/18	20/Nov/18	Extract features from segments	Dataframe containing user_id, session_id, segment and all new columns.	• For each segment ○ average ○ min ○ max ○ median ○ lower quartile ○ upper quartile ○ Inter quartilre range • Calculate those features also for parts (beginning, middle, end) of segment (Defined by count of points - events, custom chosing) • Calculate duration, distance, start and end x;y, trajectory length	Kamil Burda
🟩	BEL-78	DONE	BEL Sprint 3	05/Nov/18	20/Nov/18	Adjust data to required format	Dataset in required form (columns - time, x, y, id_user)	As a researcher I want to integrate external csv files to required format Suggestion: create function that will transform given data to DataFrame with specified labels (time, x, y .. as we require)	Kamil Burda
🟩	BEL-84	DONE	BEL Sprint 3	06/Nov/18	20/Nov/18	Generate dataset from our data	Downloadable csv from our server	As a researcher, I want to export data from server to csv file, so that I can use it for further processing.	Kamil Burda
🟩	BEL-29	DONE	BEL Sprint 3	09/Oct/18	20/Nov/18	User authentication	FP, FN rate for each user mean, std and median for those metrics per user	Usually, for n users from an experiment, user authentication is computed as follows: • For each user: ○ make user the owner (positive class), the others impostors (negative class) ○ train model (binary classifier, anomaly detector) ○ test model • report metrics from all users ○ metrics for each user individually ○ statistics - average, std. Metrics • "typical" metrics for binary classifiers: accuracy, precision, recall, F1-score • domain-specific: FAR, FRR, EER • User should be able to choose the reported metrics	Kamil Burda
🟩	BEL-79	DONE	BEL Sprint 3	06/Nov/18	20/Nov/18	Compute speed related columns from raw data	Computed columns are visible in table with raw data.	Compute additional columns (see picture in attachments) for data	Kamil Burda

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✓	BEL-72	DONE	BEL Sprint 3	02/Nov/18	20/Nov/18	Change demo implementation	builded lib removed from repo master version of demo deployed on gitlab-pages	Please stop building library into repository. Artifacts are available from CI. https://docs.gitlab.com/ee/user/project/pipelines/job_artifacts.html#downloading-the-latest-artifacts Please state this information in readme.	Ján Vnenčák
⊡	BEL-100	DONE	BEL Sprint 3	12/Nov/18	20/Nov/18	BEL-29 / Add function for metrics calculation		Write function which computes metrics. This function accepts actual class labels and predicted class labels as input.	Matej Končál
⊡	BEL-112	DONE	BEL Sprint 3	19/Nov/18	20/Nov/18	BEL-29 / Add functions to compute domain specific metrics		Calculate metrics FAR, FRR, EER	Michal Manak
⊡	BEL-98	DONE	BEL Sprint 3	12/Nov/18	20/Nov/18	BEL-29 / Write transformer which adds label column for user		Write transformer which could be used in Pipeline and accepts $user\_id$ as parameter. Output of this transformer will contain label column, which represents if row belongs (1)/not belongs (0) to user with $user\_id$ passed in parameter.	Tomáš Jendrejčák
⊡	BEL-97	DONE	BEL Sprint 3	12/Nov/18	20/Nov/18	BEL-78 / Create function for data column name preprocess		Function should transform data column name to name that we require for ml module.	Michal Manak
⊡	BEL-93	DONE	BEL Sprint 3	10/Nov/18	20/Nov/18	BEL-27 / Compute features for each segment		Write function to compute features for each segment • average • min • max • median • lower quartile • upper quartile • inter quartilre range • duration • start x • start y • end x • end y Matej Končál suggest to use pandas.grouby.agg. Make groupby general, so i can change groupby column name and compute features e.g. for segment parts	Matej Končál
⊡	BEL-92	DONE	BEL Sprint 3	10/Nov/18	20/Nov/18	BEL-27 / Split segments to parts		Write function to split each segments to 3 parts (maybe more, if there is easy solution): • beginning - e.g. identifier <seg_num>_b • middle - e.g. identifier <seg_num>_m • end - e.g. identifier <seg_num>_e Make function general, so it must be easy to change split criterion, e.g. split criterion will be passed to function via parameter	Matúš Kalafut
⊡	BEL-94	DONE	BEL Sprint 3	10/Nov/18	20/Nov/18	BEL-27 / Compute movement length for segment		Write functions which accepts data from one segment/part of segment and compute: • trajectory length • air distance from start to end	Tomáš Jendrejčák
⊡	BEL-88	DONE	BEL Sprint 3	07/Nov/18	19/Nov/18	BEL-84 / Implement data conversion		Implement data conversion from structure stored in database into CSV format.	Matúš Kalafut

T	Key	Status	Sprint	Created	Updated	Summary	Acceptance criteria	Description	Assignee
📋	BEL-111	IN PROGRESS	BEL Sprint 6	19/Nov/18	19/Nov/18	BEL-106 / Error handling			*Unassigned*
📋	BEL-105	TO DO	BEL Sprint 6	15/Nov/18	19/Nov/18	BEL-106 / Implement logging in server module		http://flask.pocoo.org/docs/1.0/logging/	*Unassigned*
📋	BEL-91	DONE	BEL Sprint 3	07/Nov/18	17/Nov/18	BEL-84 / Find all possible columns	For given mongo query find all possible keys in json.	Currently we are storing this: ```{ "sessionId": 24, "timeStamp": 2580.599999986589, "eventType": "CUSTOM", "payLoad": {dynamic}, "sessionStartsAt": 1541118820776 }``` That dynamic part is problematic for us. We need to know all of those possible columns before we can start doing any processing.	Kamil Janeček
📋	BEL-107	TO DO	BEL Sprint 6	15/Nov/18	15/Nov/18	BEL-106 / Improve logger detection		https://gitlab.com/tp-fastar/server/blob/develop/behametrics/util.py#L10	*Unassigned*
🔖	BEL-104	TO DO		14/Nov/18	14/Nov/18	Specify hierarchy of criteria to split data to segments		To achieve ultimate flexibility in splitting data to segments, pass a hierarchical structure (e.g. lists of lists) to the segment split function. This very likely replaces feature extraction from parts of a single segment.	*Unassigned*
📋	BEL-87	DONE	BEL Sprint 3	07/Nov/18	07/Nov/18	BEL-84 / Finalize data format		get correct column names for CSV export relates to BEL-78	Matej Končál
🔖	BEL-56	DONE	BEL Sprint 2	23/Oct/18	06/Nov/18	Integrate logger with server	User is able to get data from session, identified by session id (shown on logger page)	As a researcher I want to store logged data per session, so that I can see the data per session.	Kamil Janeček
🔖	BEL-52	DONE	BEL Sprint 2	16/Oct/18	06/Nov/18	Log Mouse Clicks - Advanced	On scroll event, data should contain 2 properties for vertical and horizontal scroll amount delta. Mouse button property should contain all mouse click combinations.	• Logger should log also combinations of mouse clicks (all 5 mouse buttons) • Log scroll amount (horizontal, vertical)	Ján Vnenčák

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🔖	BEL-8	DONE	BEL Sprint 2	06/Oct/18	06/Nov/18	Log Custom Events	Logger should contain textfield and confirm button. After inserting custom event into textfield and button click the custom event is logged with all other attributes.	As a researcher I want to specify custom events to be logged so that I can enhance pre-processing of raw data. Events could be defined in the code. Examples: clicking or moving through a specific object The number of fields to be logged is variable. At the minimum, the name of the event should be logged (could be anything). Logging custom events on the web should be possible on any device.	Kamil Burda
🔖	BEL-25	DONE	BEL Sprint 2	09/Oct/18	06/Nov/18	Compute speed related columns from raw data	Computed columns are visible in table with raw data.	Compute additional columns (see picture in attachments) for data	Kamil Burda
🔖	BEL-26	DONE	BEL Sprint 2	09/Oct/18	06/Nov/18	Split raw data to time interval and silence segments	User is able to get data by session with segments criteria (time intervals - silence, combination)	Data should be tagged by segment according to its time interval, silence time, or combination of both. Criteria should be maximally variable.	Kamil Burda
✅	BEL-75	DONE	BEL Sprint 2	02/Nov/18	06/Nov/18	Prepare jupyter notebook for demo		Create jupyter notebook 1. load raw_logs.csv 2. demonstrate usage of functions implemented in ~~BEL-25~~ and ~~BEL-26~~	Michal Manak
🗂	BEL-77	DONE	BEL Sprint 2	05/Nov/18	05/Nov/18	BEL-8 / Interface for custom events		Allow user to programaticaly log custom events: these events will have structure defined in issue ~~BEL-74~~	Michal Manak
🗂	BEL-63	DONE	BEL Sprint 2	23/Oct/18	05/Nov/18	BEL-52 / Advanced mouse clicks implementation			Kamil Janeček
🗂	BEL-73	DONE	BEL Sprint 2	02/Nov/18	05/Nov/18	BEL-56 / Use session ID in logged data			Kamil Janeček
🗂	BEL-65	DONE	BEL Sprint 2	25/Oct/18	05/Nov/18	BEL-56 / Serve flask with gunicorn in production		Configure gunicorn to run flask app, when deployed to production/develop	Kamil Janeček
🗂	BEL-76	DONE	BEL Sprint 2	03/Nov/18	05/Nov/18	BEL-56 / Validate clients header		http://flask.pocoo.org/docs/1.0/api/#flask.Flask.before_request validate custom header before every request 	Matúš Kalafut
🗂	BEL-66	DONE	BEL Sprint 2	27/Oct/18	04/Nov/18	BEL-56 / Posting logged data to server			Kamil Janeček
🗂	BEL-58	DONE	BEL Sprint 2	23/Oct/18	04/Nov/18	BEL-56 / Filter session data on server			Matej Končál

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	BEL-57	DONE	BEL Sprint 2	23/Oct/18	03/Nov/18	BEL-56 / UID generation			Matej Končál
	BEL-60	DONE	BEL Sprint 2	23/Oct/18	03/Nov/18	BEL-56 / Model events in database		ideas: document per session event = meta + payload	Unassigned
	BEL-59	DONE	BEL Sprint 2	23/Oct/18	03/Nov/18	BEL-56 / Save sesion id in events			Unassigned
	BEL-64	DONE	BEL Sprint 2	25/Oct/18	02/Nov/18	BEL-56 / Server CI/CD refactor		• fix docker image creation job - cache from latest-dev image when branch develop • replace '_' with '-' in docker container name	Kamil Janeček
	BEL-74	DONE	BEL Sprint 2	02/Nov/18	02/Nov/18	BEL-8 / Define data structure	Specified data structure	Define data structure for custom events (all events)	Kamil Janeček
	BEL-13	DONE		07/Oct/18	23/Oct/18	Log Session Metadata		As a researcher I want to log information about the current session so that I can distinguish raw data from multiple sessions. Fields: • session identifier • user identifier	Unassigned
	BEL-53	DONE		16/Oct/18	23/Oct/18	Log User ID		As a researcher I want to log user ID during experiments so that I can distinguish data from multiple participants How should we determine the user ID?	Unassigned
	BEL-20	DONE		08/Oct/18	23/Oct/18	Project kickoff			Unassigned
	BEL-23	DONE	BEL Sprint 1	09/Oct/18	23/Oct/18	Store Logged Data	test of saving data (example input - json) and display correct data on retrieval	As a researcher I want to store logged data from the web so that I can later analyze the data at any given time. • display stored data • technologies	Kamil Burda
	BEL-54	DONE	BEL Sprint 1	21/Oct/18	23/Oct/18	BEL-23 / Deploy develop to VM	current develop branch deployed to VM	setup deployment /run docker container/ setup nginx	Kamil Janeček
	BEL-47	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	BEL-17 / Product deployment methodology			Michal Manak
	BEL-21	DONE	BEL Sprint 1	08/Oct/18	22/Oct/18	BEL-17 / Methodology for code writing	Defined methodologies for code writing approved by all team members	Create methodologies for code writing	Michal Manak

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🔷	BEL-39	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	BEL-17 / Methodology for code review			Matúš Kalafut
🔷	BEL-43	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	BEL-23 / Integrate server with database		Save data to database.	Michaela Balážová
🔷	BEL-22	DONE	BEL Sprint 1	08/Oct/18	22/Oct/18	BEL-17 / Methodology for version control	Defined methodologies for version control approved by all team members	Create methodologies for version control	Matúš Kalafut
🔷	BEL-42	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	BEL-23 / Backend server		Select backend technology (language, framework) for server. Expose endpoints for: 1. saving data 2. retrieving data Setup repository + CI (dockerize) + auto deploy to our VM	Michaela Balážová
💡	BEL-38	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	Big picture		https://team04-18.studenti.fiit.stuba.sk/wiki/display/BEH/Big+picture	Michal Manak
🔷	BEL-55	DONE	BEL Sprint 1	22/Oct/18	22/Oct/18	BEL-38 / Define goals of our project		• goals for this semester ○ what needs to be done in the end of winter semester (approximately 17.12.) • visions for the next semester	Michal Manak
🔷	BEL-46	DONE	BEL Sprint 1	09/Oct/18	22/Oct/18	BEL-38 / High-level product architecture			Michal Manak
🔷	BEL-49	DONE	BEL Sprint 1	09/Oct/18	21/Oct/18	BEL-17 / Definition of ready			Kamil Janeček
🔷	BEL-48	DONE	BEL Sprint 1	09/Oct/18	21/Oct/18	BEL-17 / Definition of done			Michal Manak
💡	BEL-19	DONE		08/Oct/18	21/Oct/18	Team setup			Tomáš Jendrejčák
🔷	BEL-40	DONE	BEL Sprint 1	09/Oct/18	21/Oct/18	BEL-17 / Methodologies for documentation		https://team04-18.studenti.fiit.stuba.sk/wiki/display/BEH/Documentation	Kamil Janeček

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📗	BEL-7	DONE	BEL Sprint 1	06/Oct/18	16/Oct/18	Log Mouse Raw Data	List of log events in console	As a researcher I want to log raw data from computer mice on the web so that I can use the data for further analysis. Data to log: • **log name of the event + generic data (x, y, timestamp)** • coordinates (x, y) • timestamp - as precise as possible • event type - move, click (left, middle, right, ...), scroll, ... ○ in case of clicks, distinguish mouse-down and mouse-up Additional comments: • browser and version compatibility - not really sure, as many as possible, I guess ○ chrome- latest ○ firefox- latest • performance concerns - not important at the moment References: • https://developer.mozilla.org/en-US/docs/Web/API/MouseEvent/buttons • https://developer.mozilla.org/en-US/docs/Web/Events/wheel	Kamil Burda
📘	BEL-16	DONE		08/Oct/18	15/Oct/18	BEL-19 / Webpage	Webpage meets all the minimum requirements. Webpage is available on team04-18.studenti.fiit.stuba.sk.	**Website minumum requirements:** • team name • information about teammates • project plan • current state of plan • teammates roles • links to documentation and meetings records • all interesting things connected with the project and the project workflow	Ján Vnenčák
📘	BEL-5	DONE		06/Oct/18	15/Oct/18	BEL-1 / Current server deployment	Test	setup CI for current server deployment	Matej Končál
📘	BEL-44	DONE	BEL Sprint 1	09/Oct/18	14/Oct/18	BEL-7 / Logging functionality		Method/observable which will return required data: timestamp, x, y, eventName	Kamil Janeček
📘	BEL-45	DONE	BEL Sprint 1	09/Oct/18	14/Oct/18	BEL-7 / Verify logging		Verify logging component in firefox: latest chrome: latest ■ > write all output to console	Ján Vnenčák
📘	BEL-51	DONE		13/Oct/18	14/Oct/18	BEL-19 / Font webpage	Characters with diacritic are consistent with other characters	Characters with diacritics are not consistent with other characters. Change it.	Michal Manak
📘	BEL-41	DONE	BEL Sprint 1	09/Oct/18	12/Oct/18	BEL-23 / Configure database system		Setup MongoDB on our VM. (docker container, secured instance, start on startup)	Kamil Janeček

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🔹	BEL-14	DONE		08/Oct/18	09/Oct/18	BEL-19 / Assign roles	Every team member has assigned role	Assign roles to everyone in team: • scrum master – Michal Manak • documentation – Michaela Balážová • code quality (code review, review of created tests) – Kamil Janeček • frontend – Ján Vnenčák • server admin – Matej Končál • testing – Tomáš Jendrejčák • implementation – Matúš Kalafut Discuss and figure out (later, during project) how to assign another roles like developer, versioning, backend ...	Michaela Balážová
🔹	BEL-15	DONE		08/Oct/18	08/Oct/18	BEL-19 / Team logo	created logo of team	create logo of our team https://logomakr.com/6z0HoX https://team04-18.studenti.fiit.stuba.sk/wiki/display/BEH/Team+identity	Michaela Balážová
🔹	BEL-2	DONE		02/Oct/18	06/Oct/18	BEL-1 / Confluence		Cakame na ramku: https://tfs.fiit.stuba.sk:8443/tfs/StudentsProjects/TP%20Virtual%20Machines/_workitems?id=8857 Vyzera, ze to vie rozumne bezat z dockeru: https://hub.docker.com/r/atlassian/confluence-server/	Kamil Janeček
🔹	BEL-3	DONE		02/Oct/18	02/Oct/18	BEL-1 / TLS		Dufam, ze let's encrypt pojde aj ked nemame vlastnictvo domeny. Nahodit do nginxu.	Matej Končál