Task oriented projects

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# Concept

Task Oriented Projects methodology - TOP - is based on an idea that every level of the project break-down is a task someone must execute.

## TOP Pillars

1. Everything is a task.
2. Task can be broken down to subtasks that are also tasks.
3. Every task has to be assigned to exactly one person.

# Data Model

Bold attribute values are set by default. Connecting tables and lists are not included in descriptions. \* marks mandatory data.

## Task

* \*ID
* parentID --> Task // parent task - this task is subtask
* \*title
* description
* \*personID --> Person
* datePlanStart
* datePlanEnd
* dateActualStart // when first task is marked finished
* dateActualEnd // when all tasks are marked finished, canceled or failed
* \*Status [**active**, **onHold**, finished, cancelled, failed] // If DatePlanStart is in the future, status is set to onHold, else on active
* \*Priority [trivial, low, **medium**, high, critical] // only task per person can have critical priority; is a new task is set to critical, the previous one is changed to high and user has to confirm the change.
* Weight [1, 2, 3, 4, 5, 6, 7, 8, 9, **0**] // (scrum score) assumed contribution to the parent task; 0 = 100% (or not defined); (sum of all weights = 100%)
* budgetAllocated // spent budget is calculated from expense entries to this task and all subtasks
* hoursAllocated // calculated from hour entries to this task and all subtasks
* hoursSpent // entered or calculated if timestamps of work have been entered (later is future feature)
* hourCost // value of 1 hour of work; if hours and its cost is entered, expense is subtracted from the budget
* organizationID // the customer or organization this task is ordered by
* locationID // can be set from organizationID.address or entered a new one (case: customer has multiple locations)
* Attachments --> AttachmentTask // future feature

## Person

* \*ID
* \*roleID - sets the role in the system (privileges etc.)
* administrativeID // HR employee number etc
* \*nameFirst
* nameMiddle
* \*nameLast
* description
* //contacts - array, can have 0 or multiple
* //address - array, can have 0 or multiple
* Tags --> TagPerson
* Attachments --> AttachmentPerson

## Organization

Administration Object, customers are

* \*ID
* \*name
* address --> Address
* Description
* ContactPerson --> Person
* Tags --> TagOrganisation

## Tag

* \*ID
* \*Name
* \*tagType [system, organization, personal]
* description
* colour

### System Tags

System tags are predefined and can not be deleted. They can be used as filters and can have specialized reports.

* PROJECT - top level task, assigned automatically, but can be removed
* NEW - automatic, one week after creation, automatically deleted after one week (later there can be setting for how many days task is new)
* TODO - unassigned task

# UI

UI has to be lean and focused on usability and clearness.

See design files.

UI must be responsive. Main display type is computer monitor, next priority is tablet and next is large wall mounted screen for the office. Mobile app is a future feature.

# Special

## DashBoard

Dash board presents user top levels of their tasks, their work health and other important information:

* Critical tasks
* Tasks close to end date
* Tasks in low health

## To Do

To-Dos are tasks that are not assigned to any project. They are personal and shown on users dashboard. TODO is a system tag.

## Task Weight

Task weight defines the predicted contribution of the subtask to the task. It is measured in percent (%). It is used for the calculations of the supertask’s completion.

## Task Cards

Task cards are visual representation of the task hierarchy structure. Maximum three levels (columns) of tasks are shown (while the depth of task hierarchy is not limited).

Clicking a task card opens the subtasks in the next column. It also opens a detail card of the task. Selected task is in the central column, therefor parent task and subtasks are visible (if applicable).

User can select the detail level of the content for every column:

* Basic card - shows main attributes of the task
* Detail task - shows important task details
* Single Line - shows only task name and status