TempoSort – a personal/team task orchestration web application in .net and NextJs  
  
SignUp Flow

1. Details needed
   1. Name, Email, Passcode, CreatedOn
   2. Hidden Fields = UserId, IsEmailVerified, VerifiedOn, isEmailDead
2. After SignUp we trigger an Email Verification Email -> this will come in the inbox of the email and if email is invalid/verification not done after 30Days the user is scheduled for deletion
   1. If the first verification email hard-bounces, immediately mark isEmailDead = true for early flagging and support UX.
3. After verification -> Email is Verified

## Login Flow

1. If email is not verified -> please verify email -> (Resend button) (Allow max 3 resend attempts in 24 hours (anti-abuse)).  
   else -> Credentials invalid
2. Login Done -> 1 min later - welcome aboard SignalR+Email

## Personal Preferences

1. Daily digest mail settings
   1. On / Off
   2. Will send all tasks to be done in next \_ days and are of \_,\_,\_,Urgent type
   3. timezone

## Main Screen

1. Top 3 most important tasks ( a logic of due today + urgent important etc.)
2. A window with 2 options   
   All | Unread  
   ….
3. Followed by the list of teams they are a part of in card layout (team name , joined on, managed by , Role)

## Add task Flow

1. A task has 4 important things
   1. Task name,desc
   2. Task type (repetitive or only once)
      1. Repeat every day (1,2,3,4,5,6)
      2. Repeat every work day
      3. Repeat every one fixed day of week (eg Monday)
      4. Add end condition for recurring tasks:
      5. “Never ends” / “Ends on date” / “Ends after X occurrences”
   3. Task to (by default self unless part of team -> then only able to assign to people lower in role)
   4. Task Priority (Casual , Normal , Important , Urgent)
   5. Email Reminders will be as follows
      1. Casual -> no email followups, just visible on dashboard
      2. Normal -> Single Email Followup 12hrs before due date
      3. Important -> Email Followup for 5 days every 12 hrs before due date.
      4. Urgent -> (Can’t be more than 2 days in advance) FollowUp every 4 hrs before due date
   6. Personal Quiet Time => Will snooze all email notifications for 15 hr duration -> urgent will still be fired
   7. Active hours -> set by team coordinator -> will send mail even if quiet hour scheduled by member => can’t exceed 8 hrs
   8. Export to calender with ical

## Create Team

1. A person can be creator of 1 team and can be a member of 2 teams.
2. Team has Name , BGImage, Description
3. Each team can have upto 5 member types (roles)
4. All roles with higher order will be able to assign tasks to lower members
5. Team Invite Link will be sent to Email and on email click will be accepting invite
6. Auto-expire team invite links after 7 days or on first use, for security hygiene.
7. Allow creator to transfer ownership before leaving the team (especially helpful if creator reaches team limit)

Team will have its tasks Created by, Assigned to etc and similar email logic and team dashboards will contain similar logic

# DB-SCHEMA

## Users

UserId UUID PK

Name TEXT

Email TEXT UNIQUE

PasswordHash TEXT

IsEmailVerified BOOLEAN

VerifiedOn TIMESTAMP NULL

IsEmailDead BOOLEAN DEFAULT false

CreatedOn TIMESTAMP

Timezone TEXT

DailyDigestEnabled BOOLEAN

DigestWindowDays INT

DigestTaskTypes TEXT[] -- e.g. ['Important','Urgent']

## Teams

TeamId UUID PK

Name TEXT

Description TEXT

BackgroundImageUrl TEXT

CreatedBy UUID FK → Users

CreatedOn TIMESTAMP

OwnerId UUID FK → Users

## TeamMembers

TeamId UUID FK → Teams

UserId UUID FK → Users

Role INT -- 0=Viewer, 4=Owner (max 5 roles)

JoinedOn TIMESTAMP

PK (TeamId, UserId)

## Tasks

TaskId UUID PK

Title TEXT

Description TEXT

CreatedBy UUID FK → Users

AssignedTo UUID FK → Users

TeamId UUID NULL FK → Teams

DueDate TIMESTAMP

Priority TEXT CHECK IN ('Casual', 'Normal', 'Important', 'Urgent')

Status TEXT CHECK IN ('Pending', 'Completed')

CreatedOn TIMESTAMP

IsRecurring BOOLEAN

## TaskRecurrence

TaskId UUID PK FK → Tasks

RecurrenceType TEXT CHECK IN ('Daily', 'Workday', 'Weekly')

DaysOfWeek TEXT[] -- e.g. ['Monday']

EndConditionType TEXT CHECK IN ('Never', 'OnDate', 'AfterX')

EndDate TIMESTAMP NULL

Occurrences INT NULL

## QuietTimes

UserId UUID FK → Users

StartTime TIMESTAMP

EndTime TIMESTAMP

Reason TEXT

## EmailVerifications

CREATE TABLE email\_verifications (

token UUID PRIMARY KEY,

userid UUID REFERENCES users(userid),

expires\_at TIMESTAMP NOT NULL,

created\_at TIMESTAMP NOT NULL DEFAULT NOW(),

used BOOLEAN NOT NULL DEFAULT FALSE

);